



# FCC CO-LOCATION RADIO TEST REPORT

**FCC ID** : MSQAI2202  
**Equipment** : ASUS Phone(Mobile Phone)  
**Brand Name** : ASUS  
**Model Name** : ASUS\_AI2202  
**Applicant** : ASUSTeK COMPUTER INC.  
1F., No. 15, Lide Rd., Beitou Dist.,  
Taipei City 112, Taiwan  
**Manufacturer** : ASUSTeK COMPUTER INC.  
1F., No. 15, Lide Rd., Beitou Dist.,  
Taipei City 112, Taiwan  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on May 03, 2022 and testing was performed from Jun. 23, 2022 to Jul. 18, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

*Louis Wu*

Approved by: Louis Wu

**Sporton International Inc. Wensan Laboratory**

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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### History of this test report

Report No.	Version	Description	Issued Date
FR210409G	01	Initial issue of report	Jul. 21, 2022



### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(b)	Unwanted Emissions	Pass	2.33 dB under the limit at 5150.000 MHz
3.2	15.203 15.407(a)	Antenna Requirement	Pass	-

**Declaration of Conformity:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.  
It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

**Comments and Explanations:**

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Avis Chuang**

**Report Producer: Vivian Hsu**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11a/n/ac/ax, NFC, and GNSS.

Product Feature	
<b>Antenna Type</b>	WWAN: PIFA Antenna WLAN <Ant. 7>: PIFA Antenna <Ant. 8>: PIFA Antenna Bluetooth <Ant. 7>: PIFA Antenna <Ant. 8>: PIFA Antenna GPS / Glonass / BDS / Galileo / SBAS: PIFA Antenna NFC: Loop Antenna

Antenna information		
<b>2400 MHz ~ 2483.5 MHz</b>	Peak Gain (dBi)	Ant. 7: -0.62 Ant. 8: -3.82
<b>5150 MHz ~ 5250 MHz</b>	Peak Gain (dBi)	Ant. 7: -2.02 Ant. 8: -3.98

## 1.2 Modification of EUT

No modifications made to the EUT during the testing.



### 1.3 Testing Location

<b>Test Site</b>	Sporton International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b> 03CH20-HY

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW3786

### 1.4 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures.

### 2.1 Carrier Frequency and Channel

2402-2480 MHz Bluetooth BR		2402-2480 MHz Bluetooth – LE for 1Mbps	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
78	2480	39	2480

2412-2472 MHz 802.11b		5150~5250MHz 802.11a	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
11	2462	36	5180

### 2.2 Test Mode

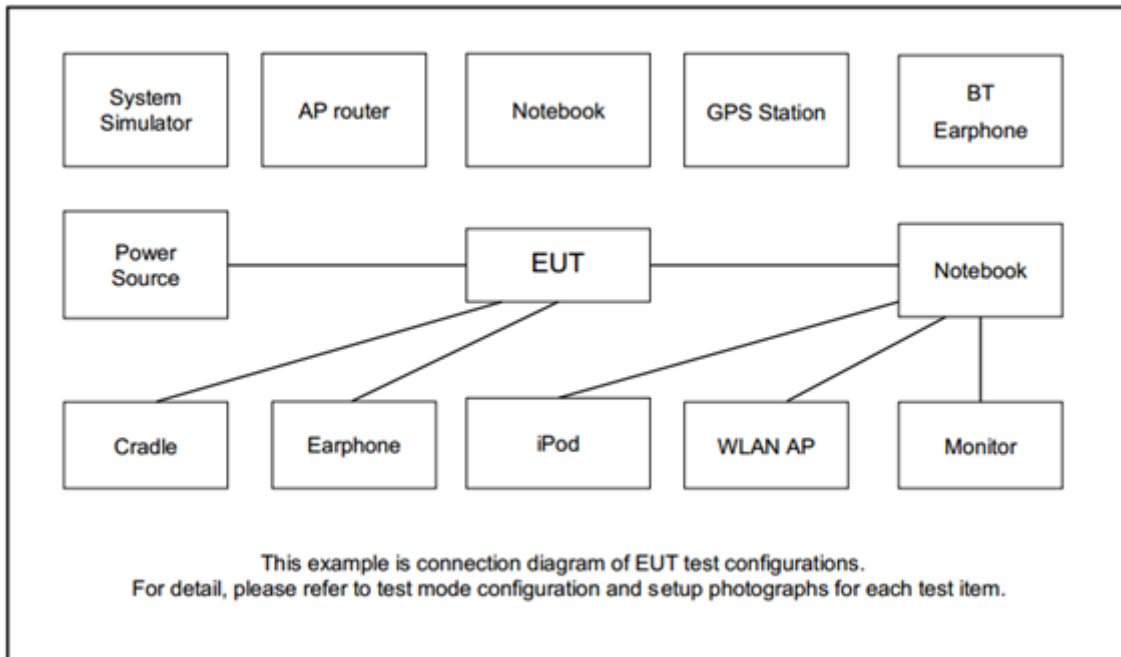
Final test modes are considering the modulation and worse data rates as below table.

<Co-Location>

Modulation	Worse Plane	Data Rate
802.11b for Ant. 8 + Bluetooth for Ant. 7	X	1Mbps + 1Mbps
802.11b for Ant. 8 + Bluetooth – LE for Ant. 7	X	1Mbps + 1Mbps
802.11b for Ant. 7 + Bluetooth for Ant. 8	X	1Mbps + 1Mbps
802.11a for MIMO <Ant. 7+8> + Bluetooth for Ant. 7	Y	MCS0 + 1Mbps
802.11a for MIMO <Ant. 7+8> + Bluetooth – LE for Ant. 7	Y	MCS0 + 1Mbps
802.11a for MIMO <Ant. 7+8> + Bluetooth for Ant. 8	Y	MCS0 + 1Mbps
802.11a for MIMO <Ant. 7+8> + Bluetooth – LE for Ant. 8	Y	MCS0 + 1Mbps
802.11a for Ant. 8 + 802.11b for Ant. 7	Y	MCS0 + 1Mbps
802.11a for Ant. 7 + 802.11b for Ant. 8	Y	MCS0 + 1Mbps

**Remark:** For Radiated Test Cases, the tests were performed with Adapter 1 and USB Cable 1.

### 2.3 Connection Diagram of Test System



### 2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Earphone	ASUS	EA010B	N/A	N/A	N/A

### 2.5 EUT Operation Test Setup

The RF test items, utility “QRCT 4.0.00193.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



### 3 Test Result

#### 3.1 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

##### 3.1.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.
- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

**Note:** The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

- (3) KDB789033 D02 v02r01 G)2)c)
  - (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
  - (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.
- (4) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27 (RMS)	68.3
- 7 (Peak)	88.3

According 987594 D02 U-NII 6GHz EMC Measurement v01 section G:

Unwanted emissions outside of restricted bands are measured with a RMS detector.

In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit



### 3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

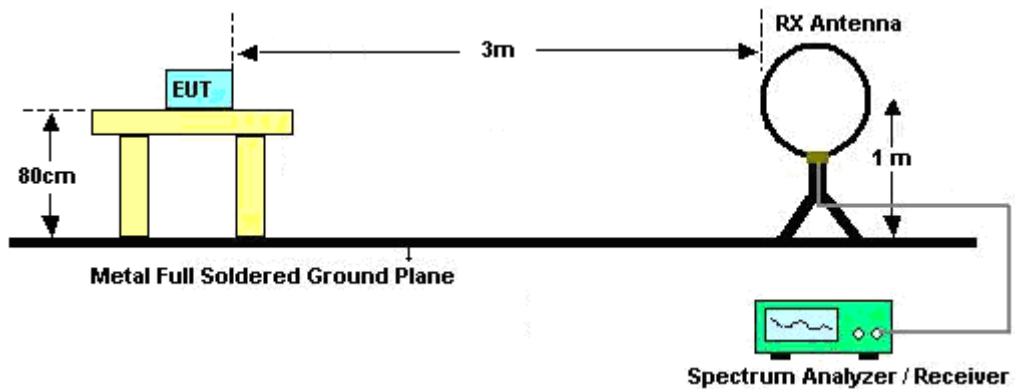
### 3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
  - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
    - RBW = 120 kHz
    - VBW = 300 kHz
    - Detector = Peak
    - Trace mode = max hold
  - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
    - RBW = 1 MHz
    - VBW  $\geq$  3 MHz
    - Detector = Peak
    - Sweep time = auto
    - Trace mode = max hold
  - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
    - RBW = 1 MHz
    - VBW = 10 Hz, when duty cycle is no less than 98 percent.
    - VBW  $\geq$  1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

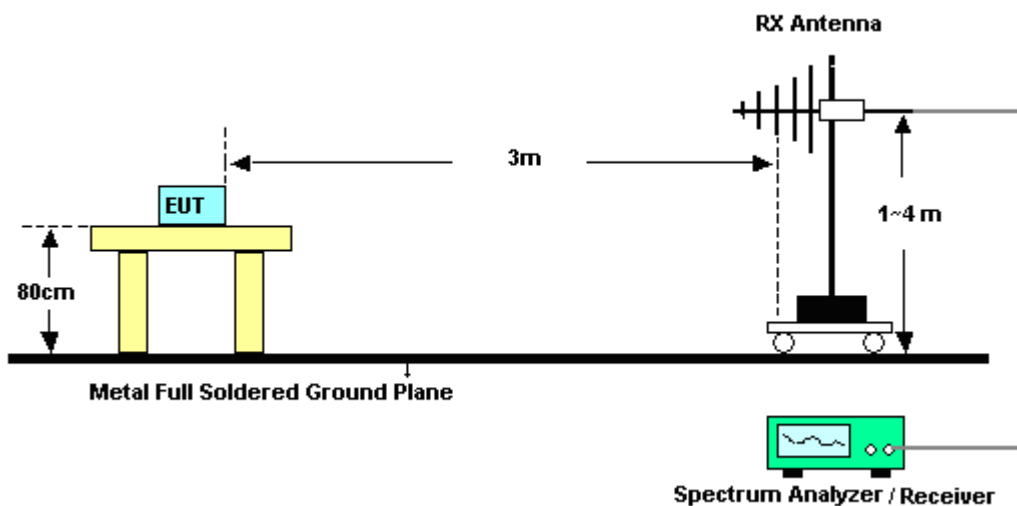
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

**3.1.4 Test Setup**

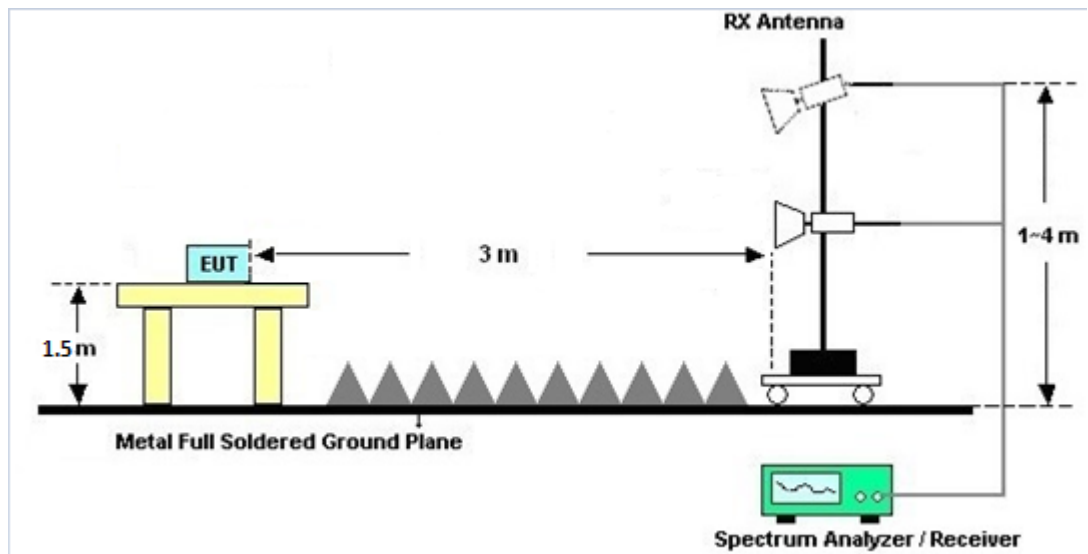
**For radiated emissions below 30MHz**



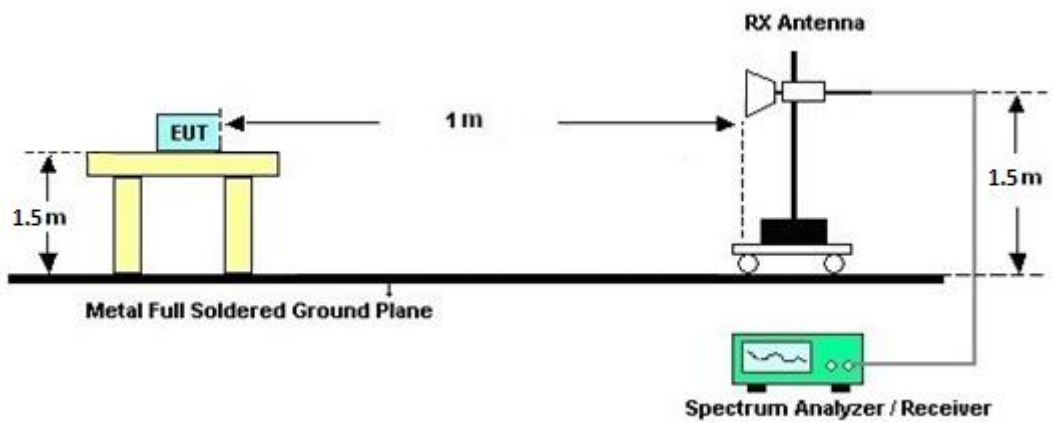
**For radiated emissions from 30MHz to 1GHz**



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





**3.1.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

**3.1.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix A and B.

**3.1.7 Duty Cycle**

Please refer to Appendix C.

**3.1.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)**

Please refer to Appendix A and B.



## **3.2 Antenna Requirements**

### **3.2.1 Standard Applicable**

If directional gain of transmitting antennas is greater than 6dBi, the power and the peak power spectral density shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### **3.2.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9010B	MY60241055	10Hz~44GHz	Jul. 12, 2021	Jun. 23, 2022~ Jul. 02, 2022	Jul. 11, 2022	Radiation (03CH20-HY)
EMI Test Receiver	Keysight	N9010B	MY60240520	10Hz~44GHz	Dec. 23, 2021	Jul. 02, 2022~ Jul. 18, 2022	Dec. 22, 2022	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Jan. 03, 2022	Jun. 23, 2022~ Jul. 18, 2022	Jan. 02, 2023	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 15, 2021	Jun. 23, 2022~ Jul. 18, 2022	Nov. 14, 2022	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Jun. 23, 2022~ Jul. 18, 2022	Dec. 23, 2022	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02360	1GHz~18GHz	Nov. 02, 2021	Jun. 23, 2022~ Jul. 18, 2022	Nov. 01, 2022	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00994	18GHz-40GHz	Nov. 04, 2021	Jun. 23, 2022~ Jul. 18, 2022	Nov. 03, 2022	Radiation (03CH20-HY)
Hygrometer	TECPEL	DTM-303B	TP200728	N/A	Mar. 22, 2022	Jun. 23, 2022~ Jul. 18, 2022	Mar. 21, 2023	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,804 015/2,804027 /2	N/A	Jan. 19, 2022	Jun. 23, 2022~ Jul. 18, 2022	Jan. 18, 2023	Radiation (03CH20-HY)
Software	Audix	E3 6.2009-8-24	RK-002156	N/A	N/A	Jun. 23, 2022~ Jul. 18, 2022	N/A	Radiation (03CH20-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 23, 2022~ Jul. 18, 2022	N/A	Radiation (03CH20-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 23, 2022~ Jul. 18, 2022	N/A	Radiation (03CH20-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 23, 2022~ Jul. 18, 2022	N/A	Radiation (03CH20-HY)



## 5 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.9 dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.2 dB
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.7 dB
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## Appendix A. Radiated Spurious Emission

Test Engineer :	JC Liang, Bill Chang and Nick Yu	Temperature :	19~22°C
		Relative Humidity :	61~66%

### 2.4GHz 2400~2483.5MHz

#### 802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11b CH11 2462MHz	*	2462	106.88	-	-	96.81	27.55	18.82	36.3	100	300	P	H	
	*	2462	103.82	-	-	93.75	27.55	18.82	36.3	100	300	A	H	
		2483.72	50.41	-23.59	74	40.23	27.63	18.86	36.31	100	300	P	H	
		2483.56	39.59	-14.41	54	29.41	27.63	18.86	36.31	100	300	A	H	
													H	
														H
	*	2462	101.87	-	-	91.8	27.55	18.82	36.3	400	19	P	V	
	*	2462	98.65	-	-	88.58	27.55	18.82	36.3	400	19	A	V	
		2496	50.07	-23.93	74	39.83	27.68	18.88	36.32	400	19	P	V	
		2491.24	38.96	-15.04	54	28.75	27.66	18.87	36.32	400	19	A	V	
														V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
BT CH78 2480MHz	*	2480	109.43	-	-	99.27	27.62	18.85	36.31	100	39	P	H	
	*	2480	84.64	-	-	-	-	-	-	-	-	A	H	
		2483.52	53.67	-20.33	74	43.49	27.63	18.86	36.31	100	39	P	H	
		2483.52	28.88	-25.12	54	-	-	-	-	-	-	A	H	
													H	
													H	
	*	2480	103.81	-	-	93.65	27.62	18.85	36.31	336	98	P	V	
	*	2480	79.02	-	-	-	-	-	-	-	-	-	A	V
		2483.96	49.78	-24.22	74	39.59	27.64	18.8	36.31	336	98	P	V	
		2483.96	24.99	-29.01	54	-	-	-	-	-	-	A	V	
													V	
													V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



802.11b\_Tx\_CH11\_Ant. 8 + BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH11 2462MHz + BT CH78 2480MHz		4924	43.35	-30.65	74	35.21	32.74	13.03	37.63	-	-	P	H
		4960	43.69	-30.31	74	35.38	32.94	13.03	37.66	-	-	P	H
		7386	47.76	-26.24	74	33.74	36.68	15.93	38.59	-	-	P	H
		7440	46.72	-27.28	74	32.92	36.52	15.91	38.63	-	-	P	H
		12615	52.81	-21.19	74	35.66	39.31	21.09	43.25	-	-	P	H
		12615	41.34	-12.66	54	24.19	39.31	21.09	43.25	-	-	A	H
		13380	53.16	-20.84	74	34.42	40.12	21.31	43.17	-	-	P	H
		13380	43	-11	54	24.26	40.12	21.31	43.17	-	-	A	H
		17985	55.77	-18.23	74	34.06	42.41	24.76	45.46	-	-	P	H
		17985	46.89	-7.11	54	25.18	42.41	24.76	45.46	-	-	A	H
		4924	43.74	-30.26	74	35.6	32.74	13.03	37.63	-	-	P	V
		4960	43.63	-30.37	74	35.32	32.94	13.03	37.66	-	-	P	V
		7386	47.03	-26.97	74	33.01	36.68	15.93	38.59	-	-	P	V
		7440	47.24	-26.76	74	33.44	36.52	15.91	38.63	-	-	P	V
		10890	51.88	-22.12	74	35.12	38.92	21.09	41.68	-	-	P	V
		10890	40.9	-13.1	54	24.14	38.92	21.09	41.68	-	-	A	V
		13245	52.86	-21.14	74	34.48	39.85	21.31	43.14	-	-	P	V
		13245	42.52	-11.48	54	24.14	39.85	21.31	43.14	-	-	A	V
	17985	56.71	-17.29	74	35	42.41	24.76	45.46	-	-	P	V	
	17985	47.2	-6.8	54	25.49	42.41	24.76	45.46	-	-	A	V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



**2.4GHz 2400~2483.5MHz**

**802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11b CH11 2462MHz	*	2462	107.1	-	-	97.03	27.55	18.82	36.3	100	299	P	H	
	*	2462	103.84	-	-	93.77	27.55	18.82	36.3	100	299	A	H	
		2483.88	49.39	-24.61	74	39.2	27.64	18.86	36.31	100	299	P	H	
		2483.68	39.2	-14.8	54	29.02	27.63	18.86	36.31	100	299	A	H	
													H	
														H
	*	2462	102.06	-	-	91.99	27.55	18.82	36.3	397	19	P	V	
	*	2462	98.91	-	-	88.84	27.55	18.82	36.3	397	19	A	V	
		2495.4	49.4	-24.6	74	39.16	27.68	18.88	36.32	397	19	P	V	
		2483.8	38.51	-15.49	54	28.32	27.64	18.86	36.31	397	19	A	V	
														V
														V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
BLE (1M) CH39 2480MHz	*	2480	102.39	-	-	92.23	27.62	18.85	36.31	122	32	P	H
	*	2480	101.69	-	-	91.53	27.62	18.85	36.31	122	32	A	H
		2496.12	49.93	-24.07	74	39.69	27.68	18.88	36.32	122	32	P	H
		2493.48	40.76	-13.24	54	30.53	27.67	18.88	36.32	122	32	A	H
												P	H
												A	H
	*	2480	94.57	-	-	84.41	27.62	18.85	36.31	342	92	P	V
	*	2480	93.98	-	-	83.82	27.62	18.85	36.31	342	92	A	V
		2495.08	50.12	-23.88	74	39.88	27.68	18.88	36.32	342	92	P	V
		2498	40.21	-13.79	54	29.95	27.69	18.89	36.32	342	92	A	V
												P	V
												A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11b\_Tx\_CH11\_Ant. 8 + Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH11 2462MHz + BLE (1M) CH39 2480MHz		4924	43.44	-30.56	74	35.3	32.74	13.03	37.63	-	-	P	H
		4960	44.12	-29.88	74	35.81	32.94	13.03	37.66	-	-	P	H
		7386	47.51	-26.49	74	33.49	36.68	15.93	38.59	-	-	P	H
		7440	47.06	-26.94	74	33.26	36.52	15.91	38.63	-	-	P	H
		12600	52.4	-21.6	74	35.29	39.3	21.07	43.26	-	-	P	H
		12600	41.24	-12.76	54	24.13	39.3	21.07	43.26	-	-	A	H
		13350	53.19	-20.81	74	34.59	40	21.76	43.16	-	-	P	H
		13350	42.84	-11.16	54	24.24	40	21.76	43.16	-	-	A	H
		17895	54.72	-19.28	74	33.57	41.84	24.7	45.39	-	-	P	H
		17895	46.6	-7.4	54	25.45	41.84	24.7	45.39	-	-	A	H
		4924	44.23	-29.77	74	36.09	32.74	13.03	37.63	-	-	P	V
		4960	43.84	-30.16	74	35.53	32.94	13.03	37.66	-	-	P	V
		7386	47.08	-26.92	74	33.06	36.68	15.93	38.59	-	-	P	V
		7440	47.88	-26.12	74	34.08	36.52	15.91	38.63	-	-	P	V
		10695	52.26	-21.74	74	35.54	39.1	19.33	41.71	-	-	P	V
		10695	40.9	-13.1	54	24.18	39.1	19.33	41.71	-	-	A	V
		13380	53.19	-20.81	74	34.45	40.12	21.79	43.17	-	-	P	V
		13380	42.89	-11.11	54	24.15	40.12	21.79	43.17	-	-	A	V
	17970	55.44	-18.56	74	33.82	42.32	24.75	45.45	-	-	P	V	
	17970	46.76	-7.24	54	25.14	42.32	24.75	45.45	-	-	A	V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



2.4GHz 2400~2483.5MHz

802.11b\_Tx\_CH11\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH11 2462MHz	*	2462	108.65	-	-	98.58	27.55	18.82	36.3	394	24	P	H
	*	2462	105.57	-	-	95.5	27.55	18.82	36.3	394	24	A	H
		2484.28	49.36	-24.64	74	39.17	27.64	18.86	36.31	394	24	P	H
		2483.92	42.23	-11.77	54	32.04	27.64	18.86	36.31	394	24	A	H
													H
													H
	*	2462	105.47	-	-	95.4	27.55	18.82	36.3	301	103	P	V
	*	2462	102.39	-	-	92.32	27.55	18.82	36.3	301	103	A	V
		2484.04	49.41	-24.59	74	39.22	27.64	18.86	36.31	301	103	P	V
		2490	41.92	-12.08	54	31.71	27.66	18.87	36.32	301	103	A	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
BT CH78 2480MHz	*	2480	107.82	-	-	97.66	27.62	18.85	36.31	377	25	P	H	
	*	2480	83.03	-	-	-	-	-	-	-	-	A	H	
		2483.76	50.18	-23.82	74	39.99	27.64	18.86	36.31	377	25	P	H	
		2483.76	25.39	-28.61	54	-	-	-	-	-	-	A	H	
												P	H	
												A	H	
	*	2480	104	-	-	93.84	27.62	18.85	36.31	382	147	P	V	
	*	2480	79.21	-	-	-	-	-	-	-	-	-	A	V
		2494.2	49.65	-24.35	74	39.41	27.68	18.88	36.32	382	147	P	V	
		2494.2	24.86	-29.14	54	-	-	-	-	-	-	A	V	
												P	V	
												A	V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													





802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH11 2462MHz + BT CH78 2480MHz		4924	43.7	-30.3	74	35.56	32.74	12.5	37.63	-	-	P	H
		4960	43.38	-30.62	74	35.07	32.94	12.49	37.66	-	-	P	H
		7386	47.66	-26.34	74	33.64	36.68	15.53	38.59	-	-	P	H
		7440	47.86	-26.14	74	34.06	36.52	15.5	38.63	-	-	P	H
		12660	52.19	-21.81	74	34.94	39.36	20.65	43.24	-	-	P	H
		12660	41.49	-12.51	54	24.24	39.36	20.65	43.24	-	-	A	H
		13365	53.57	-20.43	74	34.91	40.06	21.29	43.17	-	-	P	H
		13365	42.79	-11.21	54	24.13	40.06	21.29	43.17	-	-	A	H
		17985	54.96	-19.04	74	33.25	42.41	24.2	45.46	-	-	P	H
		17985	47.04	-6.96	54	25.33	42.41	24.2	45.46	-	-	A	H
		4924	43.55	-30.45	74	35.41	32.74	12.5	37.63	-	-	P	V
		4960	43.84	-30.16	74	35.53	32.94	12.49	37.66	-	-	P	V
		7386	47.19	-26.81	74	33.17	36.68	15.53	38.59	-	-	P	V
		7440	47.56	-26.44	74	33.76	36.52	15.5	38.63	-	-	P	V
		11370	53	-21	74	36.11	39.34	19.45	42.4	-	-	P	V
		11370	41.05	-12.95	54	24.16	39.34	19.45	42.4	-	-	A	V
		13380	53.81	-20.19	74	35.07	40.12	21.31	43.17	-	-	P	V
		13380	42.9	-11.1	54	24.16	40.12	21.31	43.17	-	-	A	V
	17940	55.82	-18.18	74	34.38	42.14	24.17	45.43	-	-	P	V	
	17940	46.82	-7.18	54	25.38	42.14	24.17	45.43	-	-	A	V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



**5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz**

**802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5147.68	63.2	-10.8	74	54.66	32.9	13.38	37.74	209	309	P	H	
		5150	50.75	-3.25	54	42.2	32.9	13.39	37.74	209	309	A	H	
	*	5180	110.46	-	-	101.79	32.96	13.46	37.75	209	309	P	H	
	*	5180	103.04	-	-	94.37	32.96	13.46	37.75	209	309	A	H	
												P	H	
												A	H	
			5148.72	61.06	-12.94	74	52.52	32.9	13.38	37.74	144	211	P	V
			5150	46.43	-7.57	54	37.88	32.9	13.39	37.74	144	211	A	V
	*		5180	101.99	-	-	93.32	32.96	13.46	37.75	144	211	P	V
	*		5180	93.09	-	-	84.42	32.96	13.46	37.75	144	211	A	V
													P	V
													A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
BT CH78 2480MHz	*	2480	100.6	-	-	99.78	27.62	9.51	36.31	346	340	P	H	
	*	2480	75.81	-	-	-	-	-	-	-	-	A	H	
		2483.6	45.06	-28.94	74	44.22	27.63	9.52	36.31	346	340	P	H	
		2483.6	20.27	-33.73	54	-	-	-	-	-	-	A	H	
												P	H	
												A	H	
	*	2480	105.55	-	-	104.73	27.62	9.51	36.31	100	58	P	V	
	*	2480	80.76	-	-	-	-	-	-	-	-	-	A	V
		2483.6	49.08	-24.92	74	48.24	27.63	9.52	36.31	100	58	P	V	
		2483.6	24.29	-29.71	54	-	-	-	-	-	-	A	V	
												P	V	
												A	V	
	<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH36 5180MHz + BT CH78 2480MHz		4960	47.95	-26.05	74	39.64	32.94	13.03	37.66	-	-	P	H
		7440	47.8	-26.2	74	33.34	36.52	16.57	38.63	-	-	P	H
		10360	48.88	-19.32	68.2	32.8	38.78	18.91	41.61	-	-	P	H
		12665	51.89	-22.11	74	34.79	39.37	20.96	43.23	-	-	P	H
		12665	41.33	-12.67	54	24.23	39.37	20.96	43.23	-	-	A	H
		13385	52.78	-21.22	74	34.24	40.14	21.57	43.17	-	-	P	H
		13385	42.78	-11.22	54	24.24	40.14	21.57	43.17	-	-	A	H
		15540	50.28	-23.72	74	33.74	38.22	23.1	44.78	128	244	P	H
		15540	42.78	-11.22	54	26.24	38.22	23.1	44.78	128	244	A	H
		17956	55.18	-18.82	74	33.73	42.24	24.65	45.44	-	-	P	H
		17956	46.72	-7.28	54	25.27	42.24	24.65	45.44	-	-	A	H
		4960	47.51	-26.49	74	39.2	32.94	13.03	37.66	-	-	P	V
		7440	47.79	-26.21	74	33.33	36.52	16.57	38.63	-	-	P	V
		10360	48.88	-19.32	68.2	32.8	38.78	18.91	41.61	-	-	P	V
		11554	51.81	-22.19	74	35.48	39.05	19.98	42.7	-	-	P	V
		11554	40.59	-13.41	54	24.26	39.05	19.98	42.7	-	-	A	V
		13380	53.06	-20.94	74	34.54	40.12	21.57	43.17	-	-	P	V
		13380	42.89	-11.11	54	24.37	40.12	21.57	43.17	-	-	A	V
		15540	50.25	-23.75	74	33.71	38.22	23.1	44.78	100	78	P	V
		15540	42.66	-11.34	54	26.12	38.22	23.1	44.78	100	78	A	V
	17978	55.62	-18.38	74	34.03	42.37	24.67	45.45	-	-	P	V	
	17978	46.83	-7.17	54	25.24	42.37	24.67	45.45	-	-	A	V	
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



**5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz**

**802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5146.9	61.12	-12.88	74	52.57	32.91	13.38	37.74	212	310	P	H	
		5150	49.2	-4.8	54	40.65	32.9	13.39	37.74	212	310	A	H	
	*	5180	110.9	-	-	102.23	32.96	13.46	37.75	212	310	P	H	
	*	5180	102.93	-	-	94.26	32.96	13.46	37.75	212	310	A	H	
												P	H	
												A	H	
			5149.76	56.61	-17.39	74	48.07	32.9	13.38	37.74	160	213	P	V
			5150	44.58	-9.42	54	36.03	32.9	13.39	37.74	160	213	A	V
	*		5180	102.92	-	-	94.25	32.96	13.46	37.75	160	213	P	V
	*		5180	94.15	-	-	85.48	32.96	13.46	37.75	160	213	A	V
													P	V
													A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
BLE (1M) CH39 2480MHz	*	2480	96.7	-	-	86.54	27.62	18.85	36.31	350	339	P	H
	*	2480	96.16	-	-	86	27.62	18.85	36.31	350	339	A	H
		2495.92	50.33	-23.67	74	40.09	27.68	18.88	36.32	350	339	P	H
		2487.92	40.41	-13.59	54	30.2	27.65	18.87	36.31	350	339	A	H
												P	H
												A	H
	*	2480	99.82	-	-	89.66	27.62	18.85	36.31	100	59	P	V
	*	2480	99.29	-	-	89.13	27.62	18.85	36.31	100	59	A	V
		2485.88	50.09	-23.91	74	39.9	27.64	18.86	36.31	100	59	P	V
		2489.44	40.38	-13.62	54	30.17	27.66	18.87	36.32	100	59	A	V
												P	V
												A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH36 5180MHz + BLE (1M) CH39 2480MHz		4960	47.8	-26.2	74	39.49	32.94	13.03	37.66	-	-	P	H
		7440	47.67	-26.33	74	33.21	36.52	16.57	38.63	-	-	P	H
		10360	48.65	-19.55	68.2	32.57	38.78	18.91	41.61	-	-	P	H
		10641	51.52	-22.48	74	34.95	39.1	19.19	41.72	-	-	P	H
		10641	41.33	-12.67	54	24.76	39.1	19.19	41.72	-	-	A	H
		13314	53.26	-20.74	74	35.04	39.86	21.52	43.16	-	-	P	H
		13314	43.07	-10.93	54	24.85	39.86	21.52	43.16	-	-	A	H
		15540	50.54	-23.46	74	34	38.22	23.1	44.78	176	45	P	H
		15540	41.64	-12.36	54	25.1	38.22	23.1	44.78	176	45	A	H
		17945	55	-19	74	33.61	42.17	24.65	45.43	-	-	P	H
		17945	45.2	-8.8	54	23.81	42.17	24.65	45.43	-	-	A	H
		4960	47.74	-26.26	74	39.43	32.94	13.03	37.66	-	-	P	V
		7440	47.33	-26.67	74	32.87	36.52	16.57	38.63	-	-	P	V
		10360	48.63	-19.57	68.2	32.55	38.78	18.91	41.61	-	-	P	V
		12632	52.34	-21.66	74	35.33	39.33	20.93	43.25	-	-	P	V
		12632	42.29	-11.71	54	25.28	39.33	20.93	43.25	-	-	A	V
		13325	52.42	-21.58	74	34.15	39.9	21.53	43.16	-	-	P	V
		13325	42.18	-11.82	54	23.91	39.9	21.53	43.16	-	-	A	V
		15540	49.62	-24.38	74	33.08	38.22	23.1	44.78	100	316	P	V
		15540	41.75	-12.25	54	25.21	38.22	23.1	44.78	100	316	A	V
	17934	55.01	-18.99	74	33.69	42.1	24.64	45.42	-	-	P	V	
	17934	45.34	-8.66	54	24.02	42.1	24.64	45.42	-	-	A	V	
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



**5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz**

**802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5148.2	64.87	-9.13	74	56.33	32.9	13.38	37.74	209	303	P	H	
		5150	51.67	-2.33	54	43.12	32.9	13.39	37.74	209	303	P	H	
	*	5180	109.54	41.34	68.2	100.87	32.96	13.46	37.75	209	303	A	H	
	*	5180	101.23	47.23	54	92.56	32.96	13.46	37.75	209	303	P	H	
			5149.24	61.29	-12.71	74	52.75	32.9	13.38	37.74	142	211	P	V
			5150	48.12	-5.88	54	39.57	32.9	13.39	37.74	142	211	P	V
	*		5180	102.33	34.13	68.2	93.66	32.96	13.46	37.75	142	211	A	V
	*		5180	94.52	40.52	54	85.85	32.96	13.46	37.75	142	211	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													





BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
BT CH78 2480MHz	*	2480	101.14	-	-	100.32	27.62	9.51	36.31	352	342	P	H	
	*	2480	76.35	-	-	-	-	-	-	-	-	A	H	
		2496.8	45.99	-28.01	74	45.08	27.69	9.54	36.32	352	342	P	H	
		2496.8	21.2	-32.8	54	-	-	-	-	-	-	A	H	
												P	H	
												A	H	
	*	2480	105.04	-	-	104.22	27.62	9.51	36.31	100	58	P	V	
	*	2480	80.25	-	-	-	-	-	-	-	-	-	A	V
		2483.52	47.89	-26.11	74	47.05	27.63	9.52	36.31	100	58	P	V	
		2483.52	23.1	-30.9	54	-	-	-	-	-	-	A	V	
												P	V	
												A	V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH36 5180MHz + BT CH78 2480MHz		4960	47.63	-26.37	74	39.32	32.94	13.03	37.66	-	-	P	H
		7440	47.88	-26.12	74	33.42	36.52	16.57	38.63	-	-	P	H
		10360	49.38	-18.82	68.2	33.3	38.78	18.91	41.61	-	-	P	H
		12379	52.51	-21.49	74	36.03	39.02	20.69	43.23	-	-	P	H
		12379	40.71	-13.29	54	24.23	39.02	20.69	43.23	-	-	A	H
		13391	52.81	-21.19	74	34.25	40.16	21.57	43.17	-	-	P	H
		13391	42.8	-11.2	54	24.24	40.16	21.57	43.17	-	-	A	H
		15540	50.12	-23.88	74	33.58	38.22	23.1	44.78	173	49	P	H
		15540	42.69	-11.31	54	26.15	38.22	23.1	44.78	173	49	A	H
		17945	55.13	-18.87	74	33.74	42.17	24.65	45.43	-	-	P	H
		17945	46.65	-7.35	54	25.26	42.17	24.65	45.43	-	-	A	H
		4960	47.84	-26.16	74	39.53	32.94	13.03	37.66	-	-	P	V
		7440	47.84	-26.16	74	33.38	36.52	16.57	38.63	-	-	P	V
		10360	49.24	-18.96	68.2	33.16	38.78	18.91	41.61	-	-	P	V
		12456	52.18	-21.82	74	35.64	39.06	20.76	43.28	-	-	P	V
		12456	40.7	-13.3	54	24.16	39.06	20.76	43.28	-	-	A	V
		13369	53.13	-20.87	74	34.65	40.08	21.57	43.17	-	-	P	V
		13369	42.71	-11.29	54	24.23	40.08	21.57	43.17	-	-	A	V
		15540	50.59	-23.41	74	34.05	38.22	23.1	44.78	358	37	P	V
		15540	42.81	-11.19	54	26.27	38.22	23.1	44.78	358	37	A	V
	17956	55.7	-18.3	74	34.25	42.24	24.65	45.44	-	-	P	V	
	17956	46.62	-7.38	54	25.17	42.24	24.65	45.44	-	-	A	V	
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5146.9	61.04	-12.96	74	52.49	32.91	13.38	37.74	167	306	P	H	
		5150	49.13	-4.87	54	40.58	32.9	13.39	37.74	167	306	P	H	
	*	5180	110.29	-	-	101.62	32.96	13.46	37.75	167	306	P	H	
	*	5180	102.89	-	-	94.22	32.96	13.46	37.75	167	306	P	H	
			5148.72	56.94	-17.06	74	48.4	32.9	13.38	37.74	157	214	P	V
			5150	44.71	-9.29	54	36.16	32.9	13.39	37.74	157	214	P	V
	*		5182	102.53	-	-	93.86	32.96	13.47	37.76	157	214	P	V
	*		5182	94.69	-	-	86.02	32.96	13.47	37.76	157	214	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Bluetooth - LE\_1Mbps\_CH39\_Ant. 8 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
BLE (1M) CH39 2480MHz	*	2480	97.37	-	-	87.21	27.62	18.85	36.31	150	24	P	H
	*	2480	96.9	-	-	86.74	27.62	18.85	36.31	150	24	A	H
		2491.4	55.94	-18.06	74	45.72	27.67	18.87	36.32	150	24	P	H
		2496.2	42.64	-11.36	54	32.4	27.68	18.88	36.32	150	24	A	H
	*	2480	93.8	-	-	83.64	27.62	18.85	36.31	395	21	P	V
	*	2480	93.3	-	-	83.14	27.62	18.85	36.31	395	21	A	V
		2490.92	50.74	-23.26	74	40.53	27.66	18.87	36.32	395	21	P	V
		2494.56	40.67	-13.33	54	30.43	27.68	18.88	36.32	395	21	A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + Bluetooth - LE\_1Mbps\_CH39\_Ant. 8 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH36 5180MHz + BLE (1M) CH39 2480MHz		4960	47.96	-26.04	74	39.65	32.94	13.03	37.66	-	-	P	H
		7440	47.62	-26.38	74	33.16	36.52	16.57	38.63	-	-	P	H
		10360	49.09	-19.11	68.2	33.01	38.78	18.91	41.61	-	-	P	H
		12687	52.58	-21.42	74	35.44	39.39	20.98	43.23	-	-	P	H
		12687	41.48	-12.52	54	24.34	39.39	20.98	43.23	-	-	A	H
		13325	53.32	-20.68	74	35.05	39.9	21.53	43.16	-	-	P	H
		13325	42.59	-11.41	54	24.32	39.9	21.53	43.16	-	-	A	H
		15540	50.39	-23.61	74	33.85	38.22	23.1	44.78	182	37	P	H
		15540	42.66	-11.34	54	26.12	38.22	23.1	44.78	182	37	A	H
		17956	55.31	-18.69	74	33.86	42.24	24.65	45.44	-	-	P	H
		17956	46.69	-7.31	54	25.24	42.24	24.65	45.44	-	-	A	H
		4960	47.86	-26.14	74	39.55	32.94	13.03	37.66	-	-	P	V
		7440	47.6	-26.4	74	33.14	36.52	16.57	38.63	-	-	P	V
		10360	49.62	-18.58	68.2	33.54	38.78	18.91	41.61	-	-	P	V
		12423	52.38	-21.62	74	35.89	39.02	20.73	43.26	-	-	P	V
		12423	40.72	-13.28	54	24.23	39.02	20.73	43.26	-	-	A	V
		13385	53.3	-20.7	74	34.76	40.14	21.57	43.17	-	-	P	V
		13385	43.05	-10.95	54	24.51	40.14	21.57	43.17	-	-	A	V
		15540	50.49	-23.51	74	33.95	38.22	23.1	44.78	100	322	P	V
		15540	42.65	-11.35	54	26.11	38.22	23.1	44.78	100	322	A	V
	17934	55.49	-18.51	74	34.17	42.1	24.64	45.42	-	-	P	V	
	17934	46.69	-7.31	54	25.37	42.1	24.64	45.42	-	-	A	V	
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>												



**5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz**

**802.11a \_Tx\_CH36\_Ant. 8 (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5144.56	60.61	-13.39	74	52.07	32.91	13.37	37.74	186	48	P	H	
		5150	48.62	-5.38	54	40.07	32.9	13.39	37.74	186	48	A	H	
	*	5180	104.36	-	-	95.69	32.96	13.46	37.75	186	48	P	H	
	*	5180	96.05	-	-	87.38	32.96	13.46	37.75	186	48	P	H	
			5150	59.43	-14.57	74	50.88	32.9	13.39	37.74	129	177	P	V
			5149.76	46.84	-7.16	54	38.3	32.9	13.38	37.74	129	177	A	V
	*		5180	102.98	-	-	94.31	32.96	13.46	37.75	129	177	P	V
	*		5180	94.68	-	-	86.01	32.96	13.46	37.75	129	177	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



802.11b\_Tx\_CH11\_Ant. 7 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
802.11b CH11 2462MHz	*	2462	106.23	-	-	96.16	27.55	18.82	36.3	392	335	P	H	
	*	2462	103.03	-	-	92.96	27.55	18.82	36.3	392	335	A	H	
		2484.16	50.02	-23.98	74	39.83	27.64	18.86	36.31	392	335	P	H	
		2484.56	40.49	-13.51	54	30.3	27.64	18.86	36.31	392	335	A	H	
													H	
														H
	*	2462	107.5	-	-	97.43	27.55	18.82	36.3	293	86	86	P	V
	*	2462	104.26	-	-	94.19	27.55	18.82	36.3	293	86	86	A	V
		2487.16	50.51	-23.49	74	40.3	27.65	18.87	36.31	293	86	86	P	V
		2484.32	40.78	-13.22	54	30.59	27.64	18.86	36.31	293	86	86	A	V
														V
														V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



802.11a \_Tx\_CH36\_Ant. 8 + 802.11b\_Tx\_CH11\_Ant. 7 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
		4924	47.71	-26.29	74	39.59	32.74	13.01	37.63	-	-	P	H
		7386	47.37	-26.63	74	32.63	36.68	16.65	38.59	-	-	P	H
		10360	49.31	-18.89	68.2	33.23	38.78	18.91	41.61	-	-	P	H
		12236	51.49	-22.51	74	35	39.1	20.55	43.16	-	-	P	H
		12236	41.47	-12.53	54	24.98	39.1	20.55	43.16	-	-	A	H
		13248	52.78	-15.42	68.2	34.6	39.85	21.47	43.14	-	-	P	H
		13248	42.66	-11.34	54	24.48	39.85	21.47	43.14	-	-	A	H
		15540	51.24	-22.76	74	34.7	38.22	23.1	44.78	180	40	P	H
		15540	41.56	-12.44	54	25.02	38.22	23.1	44.78	180	40	A	H
		17934	54.93	-19.07	74	33.61	42.1	24.64	45.42	-	-	P	H
		17934	45.21	-8.79	54	23.89	42.1	24.64	45.42	-	-	A	H
		4924	47.8	-26.2	74	39.68	32.74	13.01	37.63	-	-	P	V
		7386	47.09	-26.91	74	32.35	36.68	16.65	38.59	-	-	P	V
		10360	48.67	-19.53	68.2	32.59	38.78	18.91	41.61	-	-	P	V
		11444	52.12	-21.88	74	35.5	39.27	19.9	42.55	-	-	P	V
		11444	42.08	-11.92	54	25.46	39.27	19.9	42.55	-	-	A	V
		13358	53.4	-20.6	74	34.97	40.03	21.56	43.16	-	-	P	V
		13358	43.38	-10.62	54	24.95	40.03	21.56	43.16	-	-	A	V
		15540	50.03	-23.97	74	33.49	38.22	23.1	44.78	100	318	P	V
		15540	41.39	-12.61	54	24.85	38.22	23.1	44.78	100	318	A	V
		17956	55.87	-18.13	74	34.42	42.24	24.65	45.44	-	-	P	V
		17956	45.64	-8.36	54	24.19	42.24	24.65	45.44	-	-	A	V

<b>Remark</b>	<ol style="list-style-type: none"> <li>1. No other spurious found.</li> <li>2. All results are PASS against Peak and Average limit line.</li> <li>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>4. The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>
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**5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz**

**802.11a \_Tx\_CH36\_Ant. 7 (Band Edge @ 3m)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11a CH36 5180MHz		5147.16	62.62	-11.38	74	54.07	32.91	13.38	37.74	100	300	P	H	
		5150	50.03	-3.97	54	41.48	32.9	13.39	37.74	100	300	A	H	
	*	5180	107.7	-	-	99.03	32.96	13.46	37.75	100	300	P	H	
	*	5180	99.62	-	-	90.95	32.96	13.46	37.75	100	300	P	H	
			5150	56.1	-17.9	74	47.55	32.9	13.39	37.74	376	11	P	V
			5150	42.74	-11.26	54	34.19	32.9	13.39	37.74	376	11	A	V
	*		5180	96.78	-	-	88.11	32.96	13.46	37.75	376	11	P	V
	*		5180	89.07	-	-	80.4	32.96	13.46	37.75	376	11	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH11 2462MHz	*	2462	104.55	-	-	94.48	27.55	18.82	36.3	140	28	P	H
	*	2462	101.34	-	-	91.27	27.55	18.82	36.3	140	28	A	H
		2498.8	49.8	-24.2	74	39.53	27.7	18.89	36.32	140	28	P	H
		2497.44	40.15	-13.85	54	29.89	27.69	18.89	36.32	140	28	A	H
													H
													H
	*	2462	99.94	-	-	89.87	27.55	18.82	36.3	378	97	P	V
	*	2462	97.46	-	-	87.39	27.55	18.82	36.3	378	97	A	V
		2494.2	49.37	-24.63	74	39.13	27.68	18.88	36.32	378	97	P	V
		2497.52	40.06	-13.94	54	29.8	27.69	18.89	36.32	378	97	A	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11a \_Tx\_CH36\_Ant. 7 + 802.11b\_Tx\_CH11\_Ant. 8 (Harmonic @ 3m)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH36 5180MHz + 802.11b CH11 2462MHz		4924	47.44	-26.56	74	39.32	32.74	13.01	37.63	-	-	P	H	
		7386	47.09	-26.91	74	32.35	36.68	16.65	38.59	-	-	P	H	
		10360	49.14	-19.06	68.2	33.06	38.78	18.91	41.61	-	-	P	H	
		11224	52.09	-21.91	74	35.36	39.12	20.52	42.11	-	-	P	H	
		11224	41.75	-12.25	54	25.02	39.12	20.52	42.11	-	-	A	H	
		13336	53.06	-20.94	74	34.74	39.94	21.57	43.16	-	-	P	H	
		13336	42.8	-11.2	54	24.48	39.94	21.57	43.16	-	-	A	H	
		15540	49.79	-24.21	74	33.25	38.22	23.1	44.78	182	42	P	H	
		15540	41.67	-12.33	54	25.13	38.22	23.1	44.78	182	42	A	H	
		17868	54.84	-19.16	74	34.09	41.52	24.65	45.37	-	-	P	H	
		17868	45.19	-8.81	54	24.44	41.52	24.65	45.37	-	-	A	H	
			4924	47.43	-26.57	74	39.31	32.74	13.01	37.63	-	-	P	V
			7386	47.59	-26.41	74	32.85	36.68	16.65	38.59	-	-	P	V
			10360	49.45	-18.75	68.2	33.37	38.78	18.91	41.61	-	-	P	V
			12203	51.71	-22.29	74	35.23	39.1	20.52	43.14	-	-	P	V
			12203	41.68	-12.32	54	25.2	39.1	20.52	43.14	-	-	A	V
			13391	52.7	-21.3	74	34.14	40.16	21.57	43.17	-	-	P	V
			13391	42.48	-11.52	54	23.92	40.16	21.57	43.17	-	-	A	V
			15540	49.39	-24.61	74	32.85	38.22	23.1	44.78	100	319	P	V
		15540	41.38	-12.62	54	24.84	38.22	23.1	44.78	100	319	A	V	
		17956	55.45	-18.55	74	34	42.24	24.65	45.44	-	-	P	V	
		17956	45.39	-8.61	54	23.94	42.24	24.65	45.44	-	-	A	V	

<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>
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Emission above 18GHz

802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8

(SHF @ 1m)

WIFI Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH11 2462MHz + BT CH78 2480MHz (SHF)		24580	43.33	-30.67	74	37.74	39.5	19.29	53.2	-	-	P	H
													H
													H
													H
													H
													H
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													H
													H
			24699	41.85	-32.15	74	35.99	39.64	19.42	53.2	-	-	P
													V
													V
													V
													V
													V
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													V
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													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 8

(SHF @ 1m)

WIFI Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH36 5180MHz + BT CH78 2480MHz (SHF)		39956	53.48	-20.52	74	36.89	44.11	26.44	53.96	-	-	P	H
		39956	44.25	-9.75	54	27.66	44.11	26.44	53.96	-	-	A	H
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			39494	53.92	-20.08	74	38.34	44	26.18	54.6	-	-	P
		39494	43.49	-10.51	54	27.91	44	26.18	54.6	-	-	A	V
													V
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Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



802.11a \_Tx\_ CH36\_Ant. 7 + 802.11b\_Tx\_ CH11\_Ant. 8  
(SHF @ 1m)

WIFI Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH36 5180MHz + 802.11b CH11 2462MHz (SHF)		38526	53.22	-14.98	68.2	39.45	43.1	25.86	55.19	-	-	P	H
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	802.11a CH36 5180MHz + 802.11b CH11 2462MHz (SHF)		39890	53.45	-20.55	74	37.12	43.98	26.4	54.05	-	-	P
		39890	44.21	-9.79	54	27.88	43.98	26.4	54.05	-	-	A	V
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Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



**Emission below 1GHz**

**802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (LF)**

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11b CH11 2462MHz + BT CH78 2480MHz (LF)		30	23.43	-16.57	40	33.54	24.37	1.18	35.66	-	-	P	H
		169.68	23.47	-20.03	43.5	40.81	15.51	2.57	35.42	-	-	P	H
		329.73	23.49	-22.51	46	35.26	19.82	3.47	35.06	-	-	P	H
		553.8	27.84	-18.16	46	32.38	25.43	4.48	34.45	-	-	P	H
		722.58	29.85	-16.15	46	31.73	26.91	5.06	33.85	-	-	P	H
		918.52	34.19	-11.81	46	32.2	29.14	5.92	33.07	-	-	P	H
		31.94	31.59	-8.41	40	42.55	23.49	1.21	35.66	-	-	P	V
		85.29	23.38	-16.62	40	43.15	13.92	1.9	35.59	-	-	P	V
		224.97	21.19	-24.81	46	38.03	15.59	2.91	35.34	-	-	P	V
		511.12	27.3	-18.7	46	33.65	23.92	4.31	34.58	-	-	P	V
		747.8	33.44	-12.56	46	34.35	27.66	5.18	33.75	-	-	P	V
	943.74	35.07	-10.93	46	31.94	30.15	5.98	33	-	-	P	V	
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.</li> </ol>												



802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (LF)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH36 5180MHz + BT CH78 2480MHz (LF)		32.91	22.68	-17.32	40	34.25	22.84	1.24	35.65	-	-	P	H
		107.6	26.49	-17.01	43.5	43.12	16.8	2.09	35.52	-	-	P	H
		367.56	25.42	-20.58	46	35.86	20.84	3.66	34.94	-	-	P	H
		579.99	28.67	-17.33	46	32.85	25.63	4.6	34.41	-	-	P	H
		885.54	33.37	-12.63	46	32.04	28.7	5.81	33.18	-	-	P	H
		960.23	35.33	-18.67	54	31.53	30.74	6.01	32.95	-	-	P	H
		40.67	29.09	-10.91	40	44.45	18.9	1.36	35.62	-	-	P	V
		108.57	23.54	-19.96	43.5	40.06	16.9	2.1	35.52	-	-	P	V
		269.59	21.85	-24.15	46	34.58	19.34	3.17	35.24	-	-	P	V
		427.7	26.01	-19.99	46	34.01	22.84	3.96	34.8	-	-	P	V
		729.37	34.88	-11.12	46	36.35	27.26	5.09	33.82	-	-	P	V
	918.52	34.52	-11.48	46	32.53	29.14	5.92	33.07	-	-	P	V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.</li> </ol>												





802.11a \_Tx\_ CH36\_Ant. 7 + 802.11b\_Tx\_ CH11\_Ant. 8 (LF)

Ant. Simultaneously	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin Limit ( dB )	Limit Line ( dBµV/m )	Read Level ( dBµV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH36 5180MHz + 802.11b CH11 2462MHz (LF)		30.97	24.17	-15.83	40	34.73	23.9	1.2	35.66	-	-	P	H
		108.57	28.35	-15.15	43.5	44.87	16.9	2.1	35.52	-	-	P	H
		221.09	25.5	-20.5	46	42.69	15.26	2.89	35.34	-	-	P	H
		576.11	28.75	-17.25	46	32.99	25.6	4.58	34.42	-	-	P	H
		828.31	32.9	-13.1	46	32.94	27.92	5.53	33.49	-	-	P	H
		957.32	34.87	-11.13	46	31.17	30.66	6	32.96	-	-	P	H
		39.7	29.15	-10.85	40	43.97	19.45	1.35	35.62	-	-	P	V
		108.57	22.27	-21.23	43.5	38.79	16.9	2.1	35.52	-	-	P	V
		277.35	21.54	-24.46	46	34.65	18.89	3.22	35.22	-	-	P	V
		634.31	29.66	-16.34	46	32.98	26.13	4.77	34.22	-	-	P	V
		760.41	31.65	-14.35	46	32.45	27.7	5.23	33.73	-	-	P	V
	952.47	34.79	-11.21	46	31.26	30.51	5.99	32.97	-	-	P	V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> <li>The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.</li> </ol>												



**Note symbol**

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>Margin limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



A calculation example for radiated spurious emission is shown as below:

Ant.	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Simultaneously		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11b CH 01		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =  
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)  
= 55.45 (dBμV/m)
2. Margin Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 55.45(dBμV/m) – 74(dBμV/m)  
= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
2. Margin Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 43.54(dBμV/m) – 54(dBμV/m)  
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



## Appendix B. Radiated Spurious Emission Plots

<b>Test Engineer :</b>	JC Liang, Bill Chang and Nick Yu	<b>Temperature :</b>	19~22°C
		<b>Relative Humidity :</b>	61~66%

-L	<b>Low channel location</b>
-R	<b>High channel location</b>

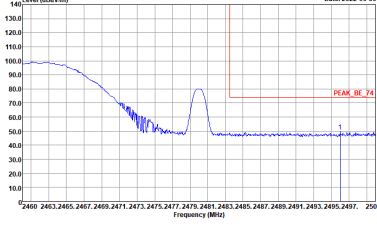
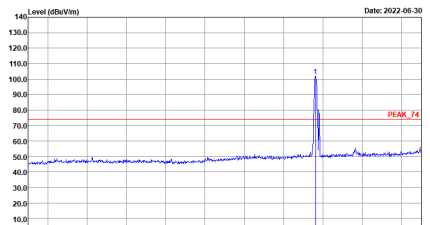
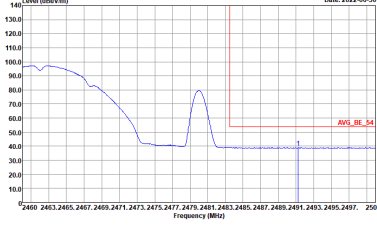
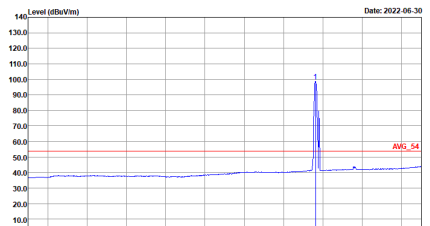


2.4GHz 2400~2483.5MHz

802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)

ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">PEAK_BE_74</p> <p>Site Condition : : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">PEAK_74</p> <p>Site Condition : : 03CH20-HY : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">AVG_BE_54</p> <p>Site Condition : : 03CH20-HY : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto</p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">AVG_54</p> <p>Site Condition : : 03CH20-HY : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto</p>



ANT	802.11b CH11 2462MHz	
Simultaneously	Vertical	Fundamental
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>



BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Band Edge @ 3m)

ANT	Mode 70: Ant 8 11b Ch11+Ant 7 BT(1M) Ch78	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	<p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site Condition : 03CH20-HY : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Simultaneously</b></p>	<p style="text-align: center;"><b>Vertical</b></p>	<p style="text-align: center;"><b>Fundamental</b></p>
<p style="text-align: center;"><b>Peak</b></p>	<p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site Condition : 03CH20-HY : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



802.11b\_Tx\_CH11\_Ant. 8 + BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Harmonic @ 3m)

ANT	802.11b CH11 2462MHz + BT CH78 2480MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b> <b>Avg.</b></p>	<p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL</p>	<p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL</p>



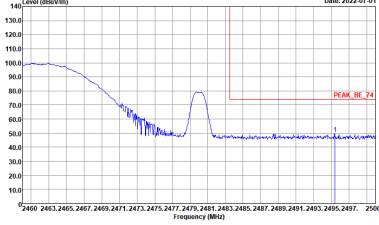
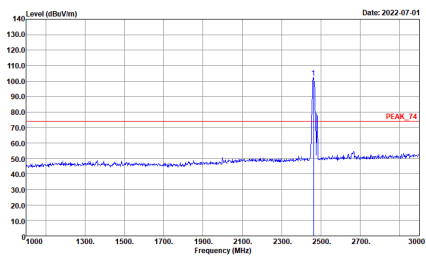
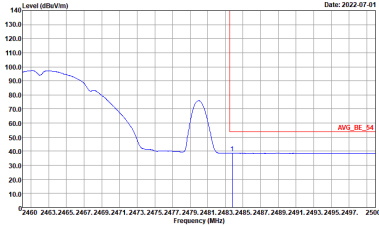
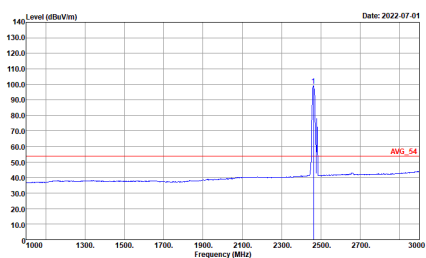


2.4GHz 2400~2483.5MHz

802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)

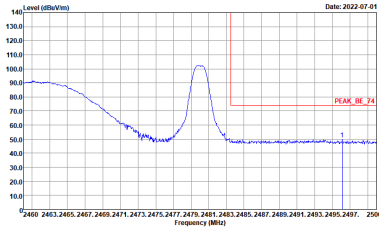
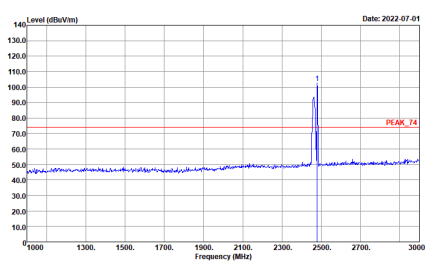
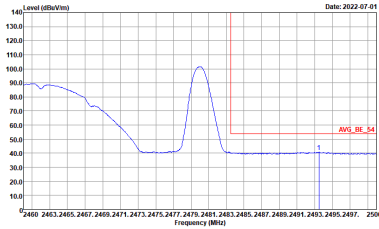
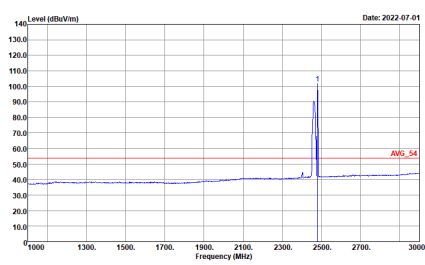
ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	<p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	<p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	<p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>



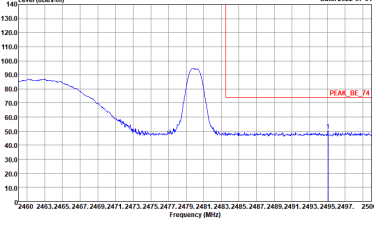
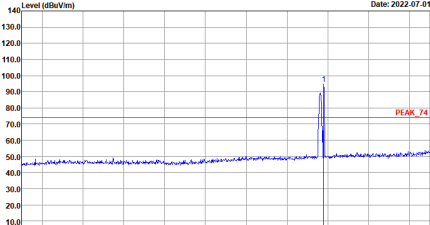
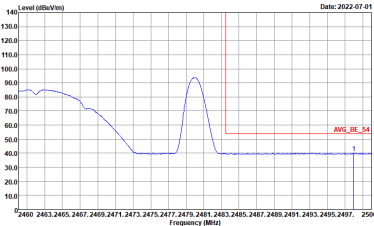
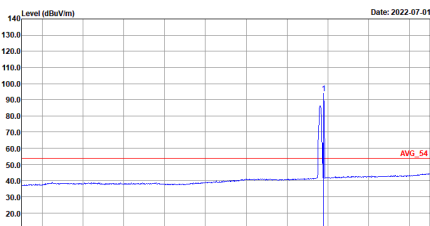
ANT	802.11b CH11 2462MHz	
Simultaneously	Vertical	Fundamental
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:0.010KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:0.010KHz SWT:Auto</p>



Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Band Edge @ 3m)

ANT	BLE (1M) CH39 2480MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



ANT	BLE (1M) CH39 2480MHz	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



802.11b\_Tx\_CH11\_Ant. 8 + Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Harmonic @ 3m)

ANT	802.11b CH11 2462MHz + BLE (1M) CH39 2480MHz	
Simultaneously	Horizontal	Vertical
<p><b>Peak</b> <b>Avg.</b></p>	<p>Site : 03CH20-FY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL</p>	<p>Site : 03CH20-FY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL</p>

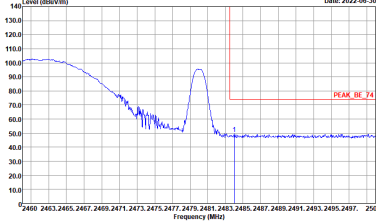
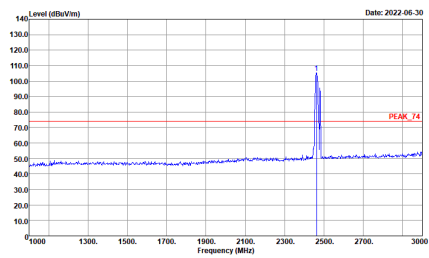
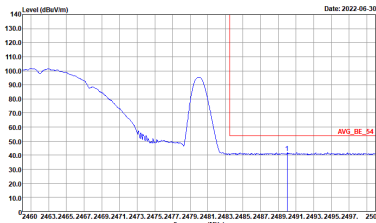
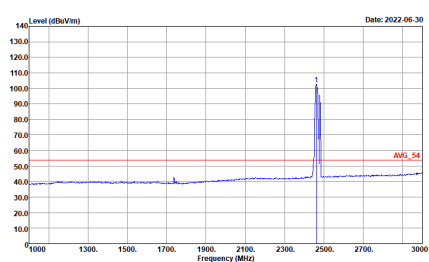


2.4GHz 2400~2483.5MHz

802.11b\_Tx\_CH11\_Ant. 7 (Band Edge @ 3m)

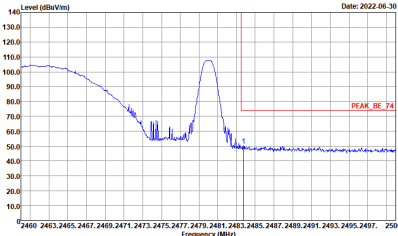
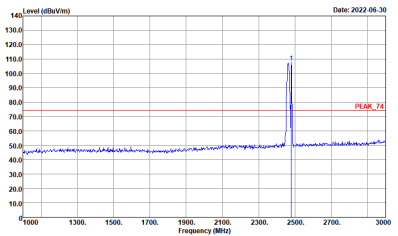
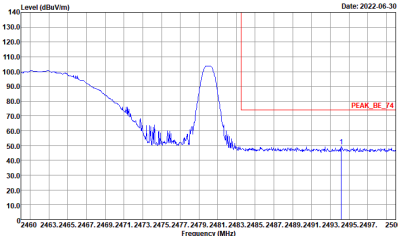
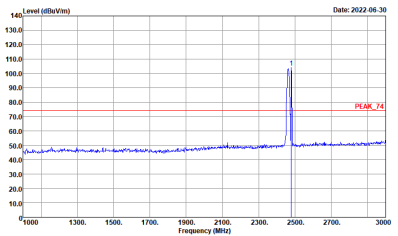
ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">PEAK_BE_74</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">PEAK_74</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">AVG_BE_54</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto</p>	<p style="text-align: right;">Date: 2022-06-30</p> <p style="text-align: center;">AVG_54</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto</p>



ANT	802.11b CH11 2462MHz	
Simultaneously	Vertical	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:10.000KHz SWT:Auto</p>



BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Band Edge @ 3m)

ANT	BT CH78 2480MHz	
<p>Simultaneously</p> <p>Peak</p>	<p>Horizontal</p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Fundamental</p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
<p>Simultaneously</p> <p>Peak</p>	<p>Vertical</p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Fundamental</p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>





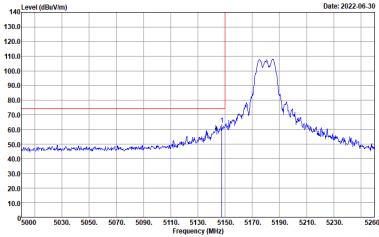
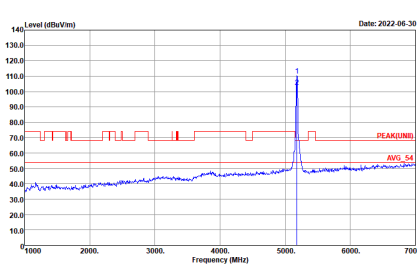
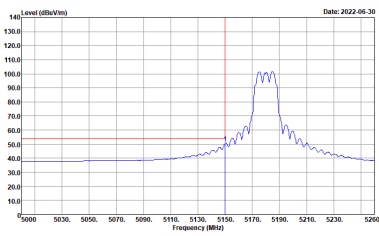
802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Harmonic @ 3m)

ANT	802.11b CH11 2462MHz + BT CH78 2480MHz	
Simultaneously	Horizontal	Vertical
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH20-FY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL</p>	<p>Site : 03CH20-FY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL</p>

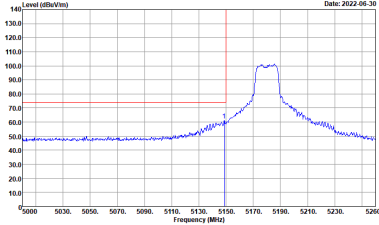


5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)

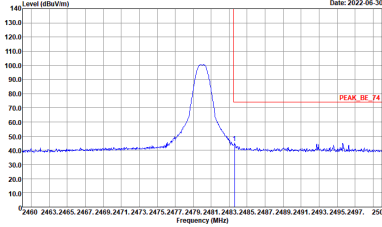
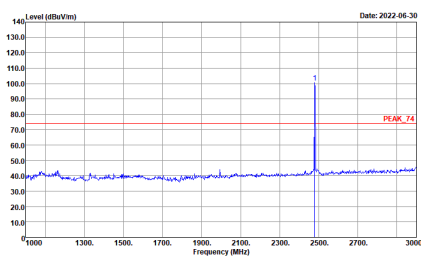
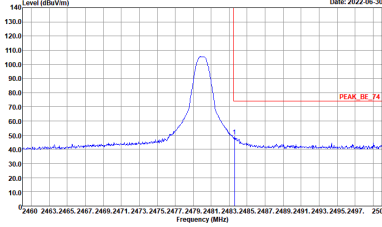
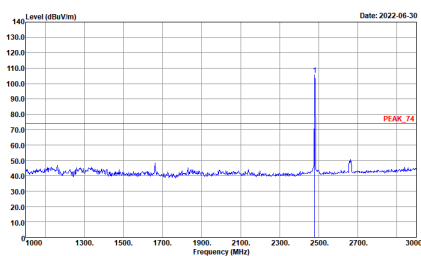
ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK(UNIT) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	Left Blank



ANT	802.11a CH36 5180MHz	
<p>Simultaneously</p>	<p style="text-align: center;"><b>Vertical</b></p>  <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p>  <p>Site : 03CH20-FY Condition : PEAK(LIN) 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Left Blank</b></p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Left Blank</b></p>

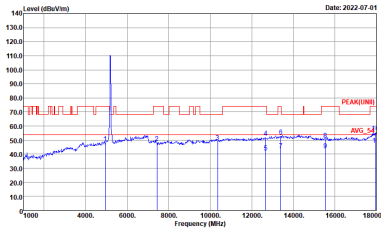
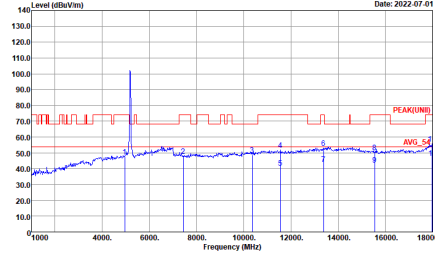


BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Band Edge @ 3m)

ANT	BT CH78 2480MHz	
<p>Simultaneously</p> <p style="text-align: center;"><b>Peak</b></p>	<p style="text-align: center;"><b>Horizontal</b></p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Simultaneously</p> <p style="text-align: center;"><b>Peak</b></p>	<p style="text-align: center;"><b>Vertical</b></p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



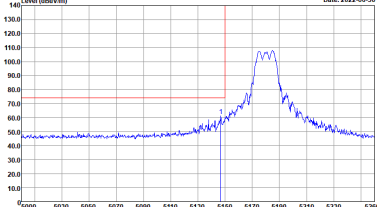
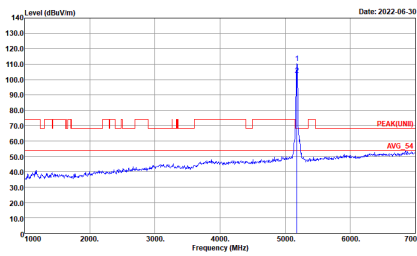
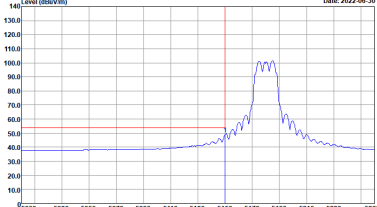
802.11a \_Tx\_ CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 7 (Harmonic @ 3m)

ANT	802.11a CH36 5180MHz + BT CH78 2480MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b> <b>Avg.</b></p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>

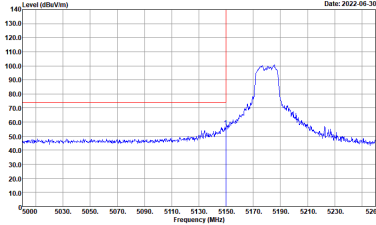
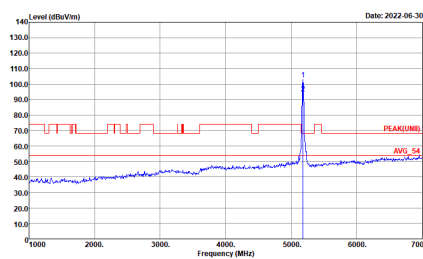
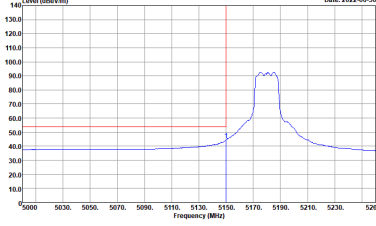


5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)

ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	Left Blank



ANT	802.11a CH36 5180MHz	
Simultaneously	Vertical	Fundamental
Peak	 <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-FY Condition : PEAK(UNL) 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	Left Blank

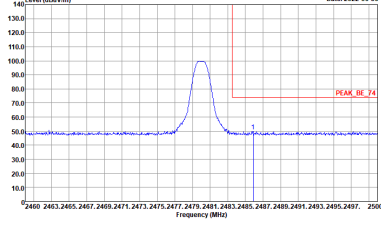
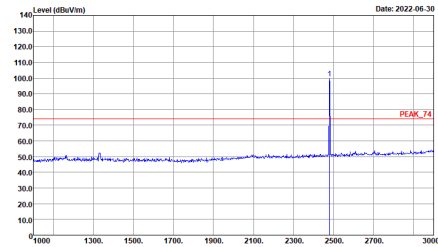
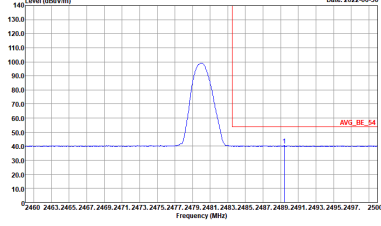
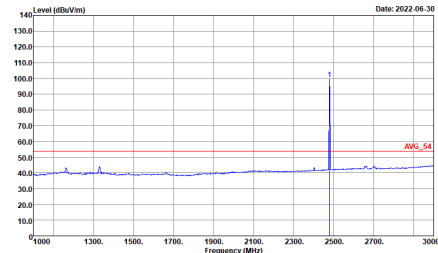


Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Band Edge @ 3m)

ANT	BLE (1M) CH39 2480MHz - L	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	<p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	<p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>





ANT	BLE (1M) CH39 2480MHz - L	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



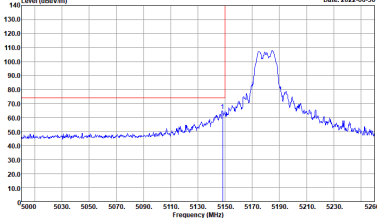
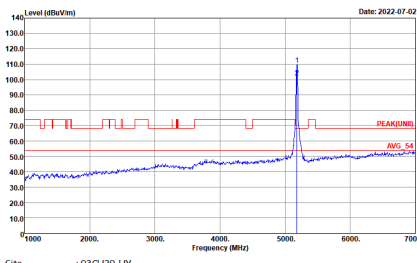
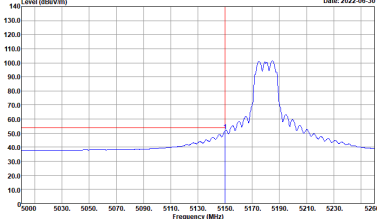
802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + Bluetooth - LE\_1Mbps\_CH39\_Ant. 7 (Harmonic @ 3m)

ANT	802.11a CH36 5180MHz + BLE (1M) CH39 2480MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b> <b>Avg.</b></p>	<p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	<p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>

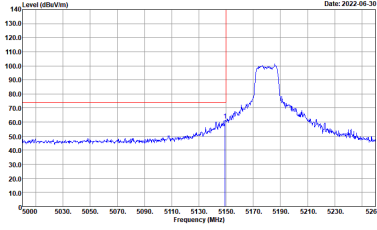
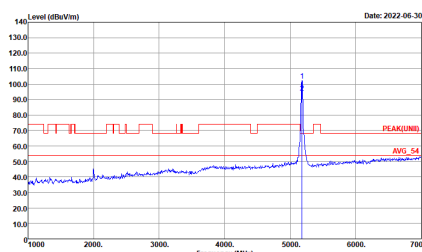
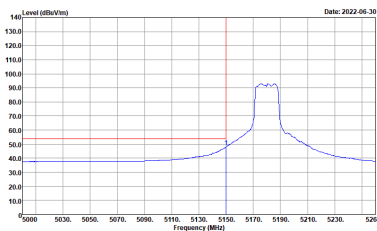
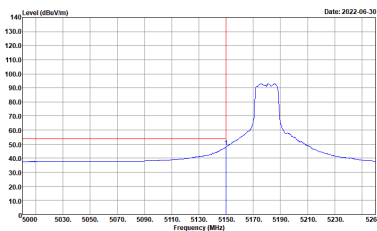


5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)

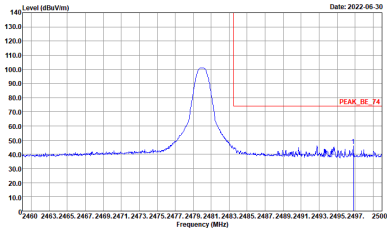
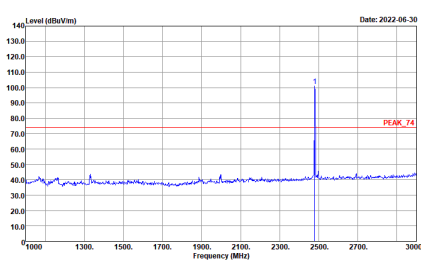
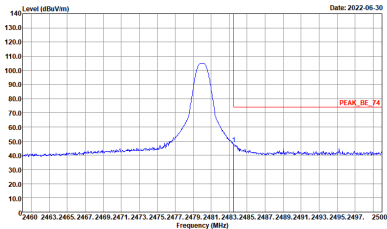
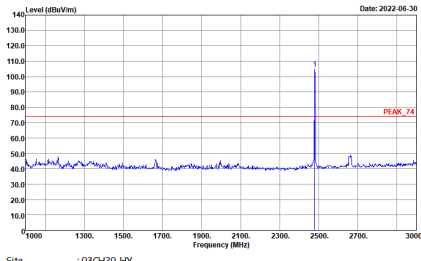
ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-02</p> <p>Site Condition : 03CH20-HY : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	Left Blank



ANT	802.11a CH36 5180MHz	
<p>Simultaneously</p>	<p style="text-align: center;"><b>Vertical</b></p> 	<p style="text-align: center;"><b>Fundamental</b></p> 
<p>Peak</p>		<p>Left Blank</p>
<p>Avg.</p>		<p>Left Blank</p>

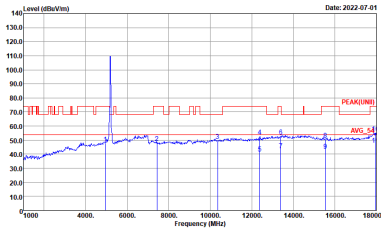
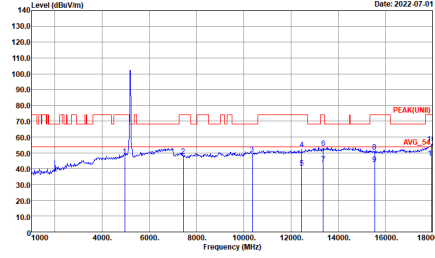


BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Band Edge @ 3m)

ANT	BT CH78 2480MHz	
<p>Simultaneously</p> <p>Peak</p>	<p>Horizontal</p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Fundamental</p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Simultaneously</p> <p>Peak</p>	<p>Vertical</p>  <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Fundamental</p>  <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



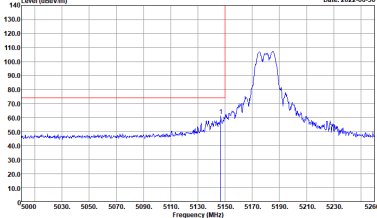
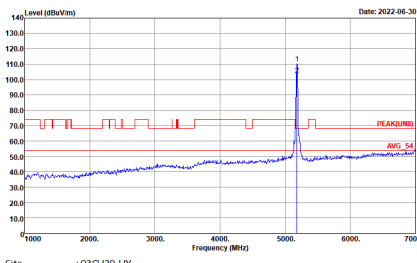
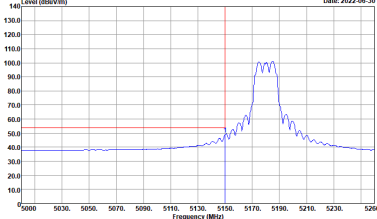
802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (Harmonic @ 3m)

ANT	802.11a CH36 5180MHz + BT CH78 2480MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b> <b>Avg.</b></p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>

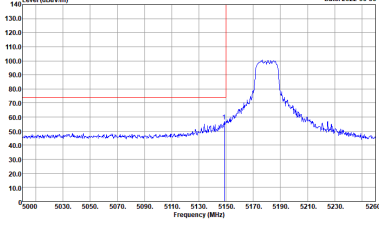
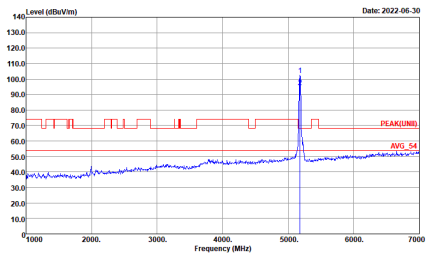
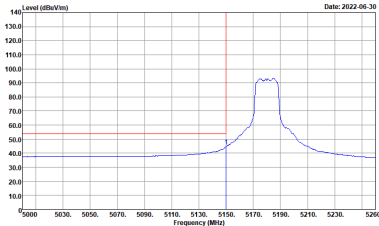


5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> (Band Edge @ 3m)

ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : PEAK(UNII) 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site Condition : 03CH20-HY : AVG_BE_54 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	Left Blank

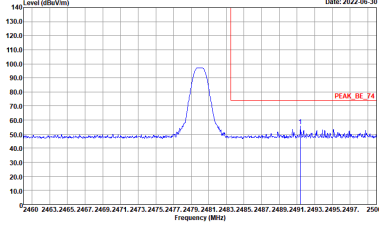
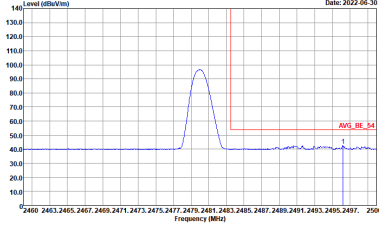
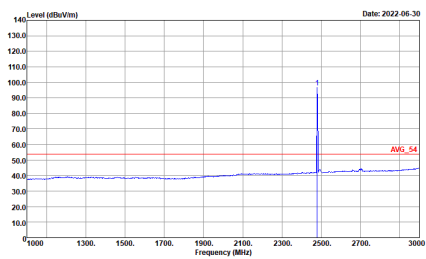


ANT	802.11a CH36 5180MHz	
<p>Simultaneously</p>	<p style="text-align: center;"><b>Vertical</b></p>  <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p>  <p>Site : 03CH20-FY Condition : PEAK(UNL) 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Left Blank</b></p>

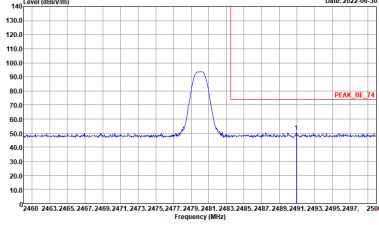
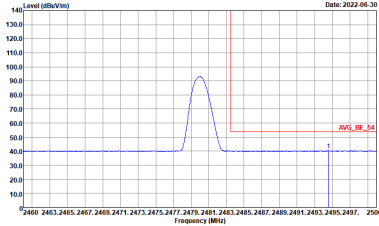
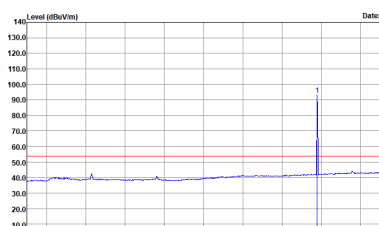




Bluetooth - LE\_1Mbps\_CH39\_Ant. 8 (Band Edge @ 3m)

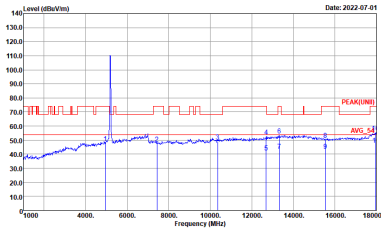
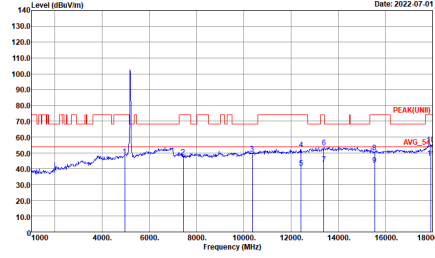
ANT	BLE (1M) CH39 2480MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



ANT	BLE (1M) CH39 2480MHz	
Simultaneously	Vertical	Fundamental
Peak	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Date: 2022-06-30</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



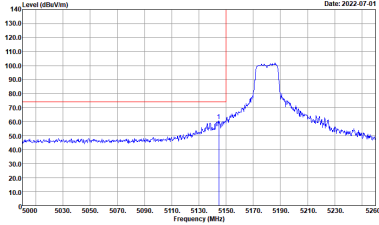
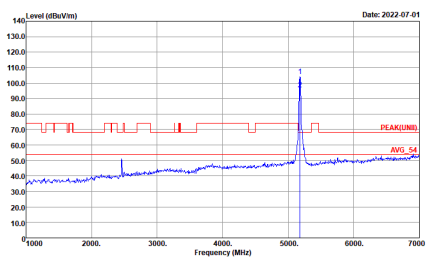
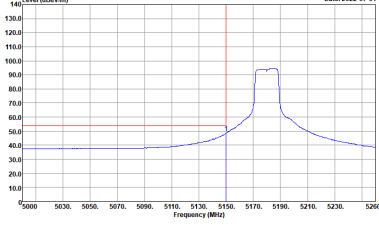
802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + Bluetooth - LE\_1Mbps\_CH39\_Ant. 8 (Harmonic @ 3m)

ANT	802.11a CH36 5180MHz + BLE (1M) CH39 2480MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b> <b>Avg.</b></p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>



5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_Ant. 8 (Band Edge @ 3m)

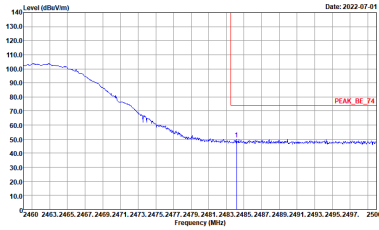
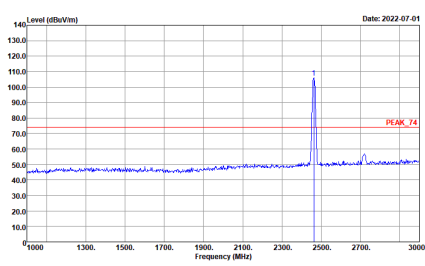
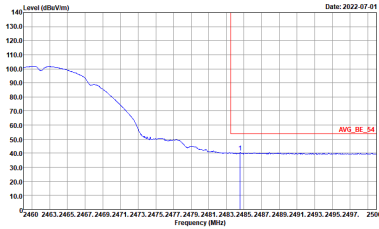
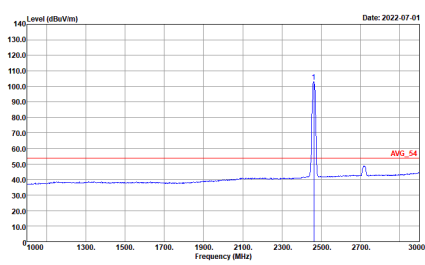
ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-FY Condition : PEAK(UNIT) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:3000.000KHz VBW:0.0010KHz SWT:Auto</p>	Left Blank



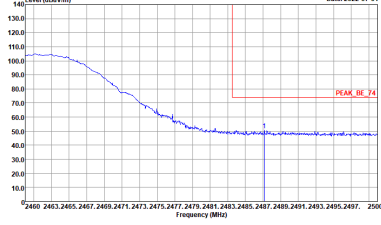
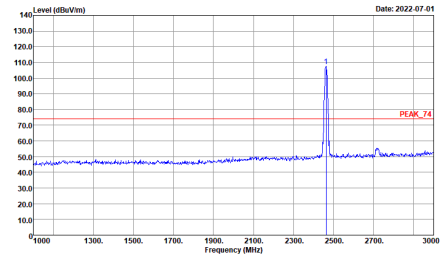
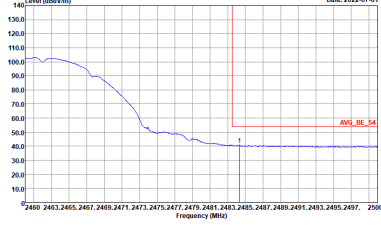
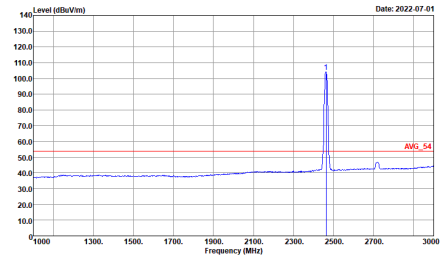
ANT	802.11a CH36 5180MHz	
<p>Simultaneously</p>	<p style="text-align: center;"><b>Vertical</b></p> <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p> <p>Site : 03CH20-FY Condition : PEAK(LIM) 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	<p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left Blank</p>
<p>Avg.</p>	<p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left Blank</p>



802.11b\_Tx\_CH11\_Ant. 7 (Band Edge @ 3m)

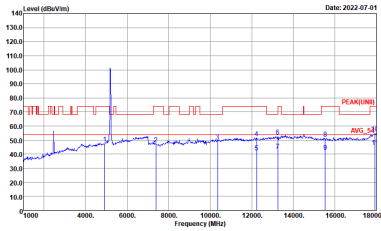
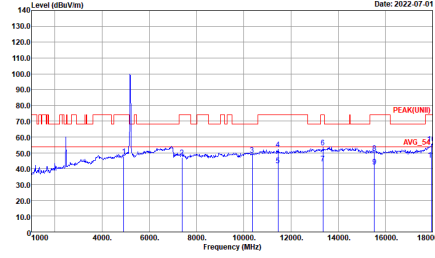
ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



ANT	802.11b CH11 2462MHz	
Simultaneously	Vertical	Fundamental
<p style="text-align: center;"><b>Peak</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_21110Z VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_21110Z VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_21110Z VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_21110Z VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



802.11a \_Tx\_CH36\_Ant. 8 + 802.11b\_Tx\_CH11\_Ant. 7 (Harmonic @ 3m)

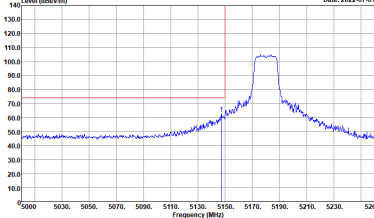
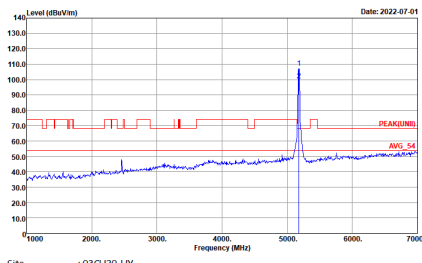
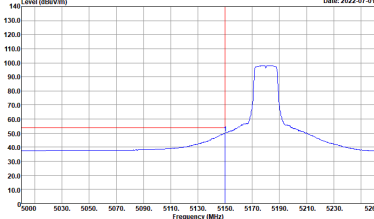
ANT	802.11a CH36 5180MHz +802.11b CH11 2462MHz	
Simultaneously	Horizontal	Vertical
<p>Peak Avg.</p>	 <p>Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	 <p>Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>



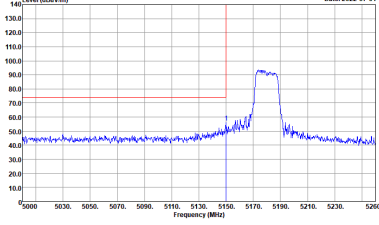
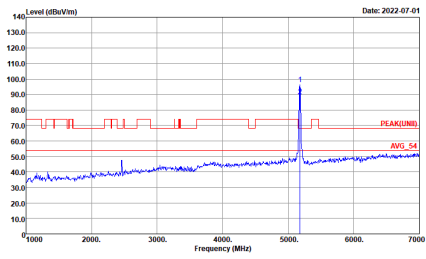
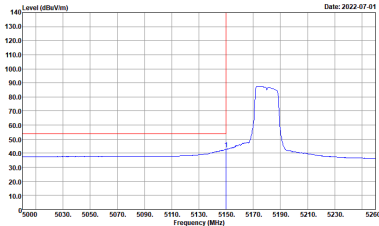



5GHz Band 1 - 5150~5250MHz + 2.4GHz 2400~2483.5MHz

802.11a \_Tx\_CH36\_Ant. 7 (Band Edge @ 3m)

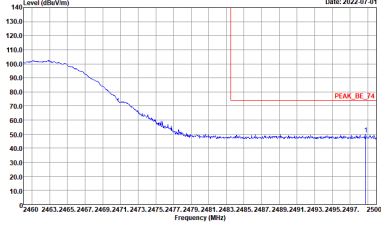
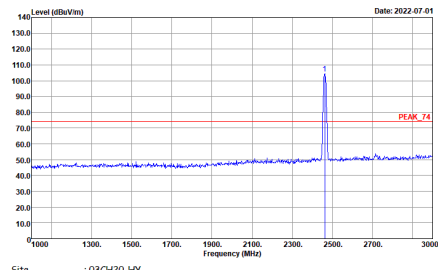
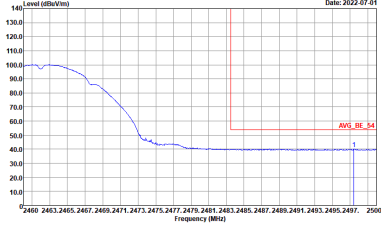
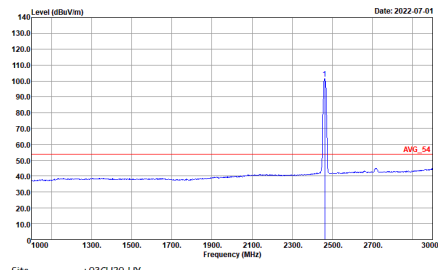
ANT	802.11a CH36 5180MHz	
Simultaneously	Horizontal	Fundamental
Peak	 <p>Date: 2022-07-01</p> <p>Site Condition : 03CH20-HY : PEAK_BE_74 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Date: 2022-07-01</p> <p>Site Condition : 03CH20-HY : PEAK(UNIT) 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	 <p>Date: 2022-07-01</p> <p>Site Condition : 03CH20-HY : AVG_BE_54 3m 91200_02360_21102 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto</p>	Left Blank



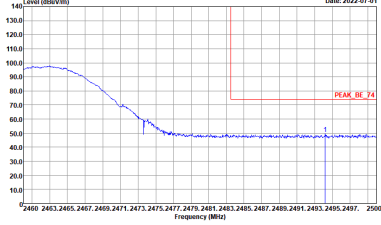
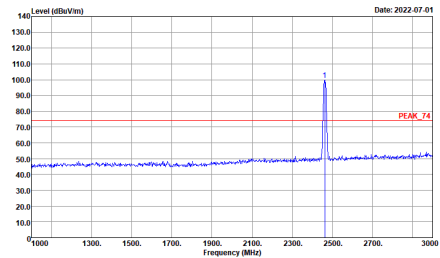
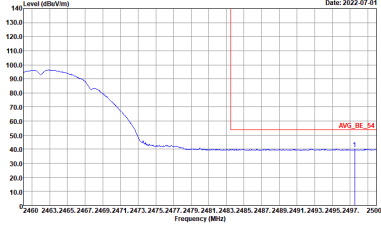
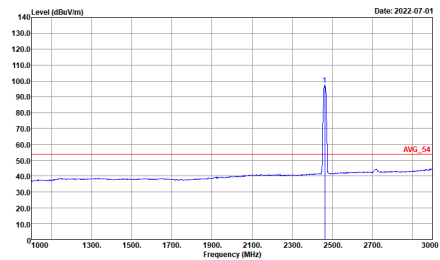
ANT	802.11a CH36 5180MHz	
<p>Simultaneously</p>	<p style="text-align: center;"><b>Vertical</b></p>  <p>Site : 03CH20-FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p style="text-align: center;"><b>Fundamental</b></p>  <p>Site : 03CH20-FY Condition : PEAK(LINE) 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left Blank</p>
<p>Avg.</p>	 <p>Site : 03CH20-FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:3000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left Blank</p>



802.11b\_Tx\_CH11\_Ant. 8 (Band Edge @ 3m)

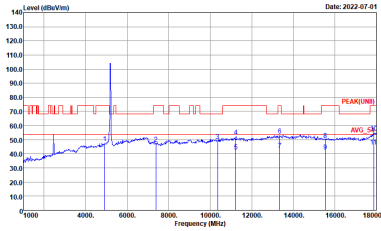
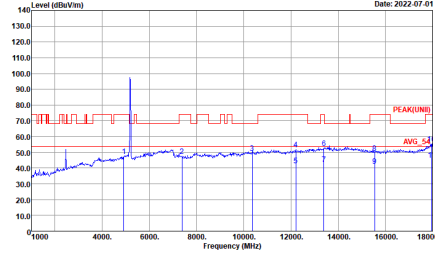
ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_211102 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



ANT	802.11b CH11 2462MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak</b></p>	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p style="text-align: center;"><b>Avg.</b></p>	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_211102 VERTICAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



802.11a \_Tx\_CH36\_Ant. 7 + 802.11b\_Tx\_CH11\_Ant. 8 (Harmonic @ 3m)

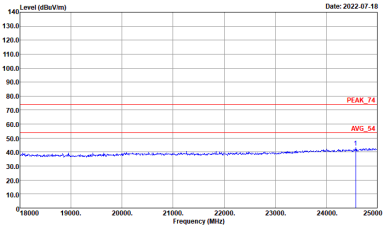
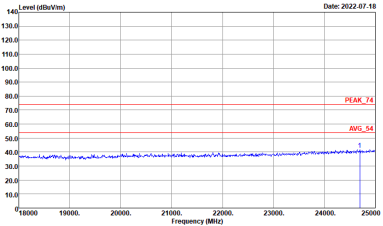
ANT	802.11a CH36 5180MHz +802.11b CH11 2462MHz	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>Peak Avg.</b></p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL</p>	 <p style="font-size: small;">Date: 2022-07-01 Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL</p>



Emission above 18GHz

802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8

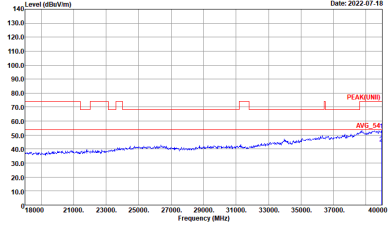
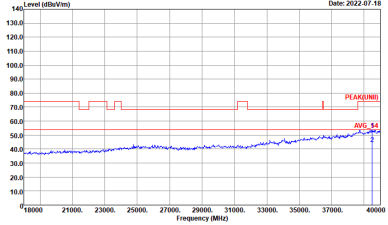
(SHF @ 1m)

ANT	802.11b CH11 2462MHz + BT CH78 2480MHz (SHF)	
Simultaneously	Horizontal	Vertical
<p style="text-align: center;"><b>QP / Peak</b></p>	 <pre> Site      : 03CH20-HY Condition : PEAK_74 1m SHF_00994_211104 HORIZONTAL Detector  : Peak Project   : 210409 EUT       : #357 Model     : Z9 Power     : 120Vac/60Hz SN        : N4A1B7N00334Z6E Mode      : 11b_Tx_Ch11 Setting   : 19.5 Mode      : BT(1M)_Tx_Ch78 Setting   : 11 Plane     : X            : With Accessory </pre>	 <pre> Site      : 03CH20-HY Condition : PEAK_74 1m SHF_00994_211104 VERTICAL Detector  : Peak Project   : 210409 EUT       : #357 Model     : Z9 Power     : 120Vac/60Hz SN        : N4A1B7N00334Z6E Mode      : 11b_Tx_Ch11 Setting   : 19.5 Mode      : BT(1M)_Tx_Ch78 Setting   : 11 Plane     : X            : With Accessory </pre>



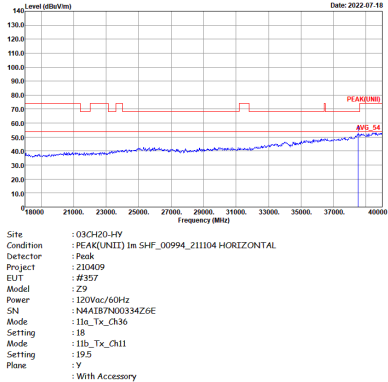
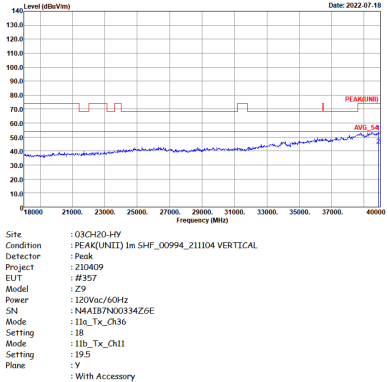
BT\_1Mbps\_TX\_CH78 for Ant. 8 + 802.11a\_TX\_CH36 for MIMO <Ant. 7 + Ant. 8>

(SHF @ 1m)

ANT	802.11a CH36 5180MHz + BT CH78 2480MHz (SHF)	
Simultaneously	Horizontal	Vertical
<p>QP / Peak</p>	 <p>Site : 03CH20-HY            Condition : PEAK(UNII) 1m SHF_00994_211104 HORIZONTAL            Detector : Peak            Project : 210409            EUT : #957            Model : Z9            Power : 120Vac/60Hz            SN : N4A187N00334Z6E            Mode : 11a_Tx_Ch36            Setting : 18.5            Mode : BT(1A)_Tx_Ch78            Setting : 11            Plane : Y            : With Accessory</p>	 <p>Site : 03CH20-HY            Condition : PEAK(UNII) 1m SHF_00994_211104 VERTICAL            Detector : Peak            Project : 210409            EUT : #957            Model : Z9            Power : 120Vac/60Hz            SN : N4A187N00334Z6E            Mode : 11a_Tx_Ch36            Setting : 18.5            Mode : BT(1A)_Tx_Ch78            Setting : 11            Plane : Y            : With Accessory</p>



802.11b\_TX\_CH11 for Ant. 8 + 802.11a\_TX\_CH36 for Ant. 7  
(SHF @ 1m)

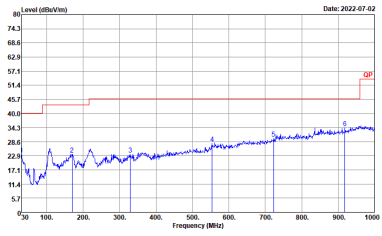
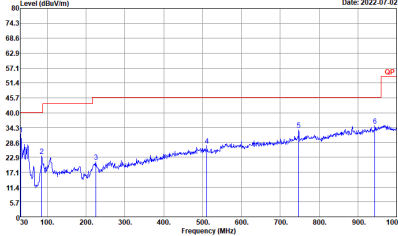
ANT	802.11a CH36 5180MHz + 802.11b CH11 2462MHz (SHF)	
Simultaneously	Horizontal	Vertical
<p>QP / Peak</p>		





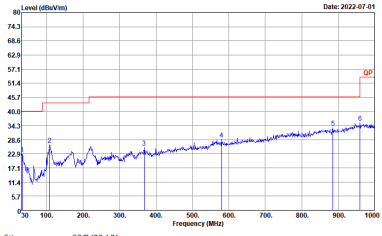
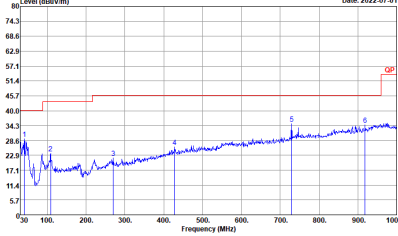
Emission below 1GHz

802.11b\_Tx\_CH11\_Ant. 7 + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (LF)

ANT	802.11b CH11 2462MHz +BT CH78 2480MHz (LF)	
Simultaneously	Horizontal	Vertical
QP / Peak	 <p data-bbox="470 772 853 795">Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 HORIZONTAL</p>	 <p data-bbox="949 772 1348 795">Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 VERTICAL</p>

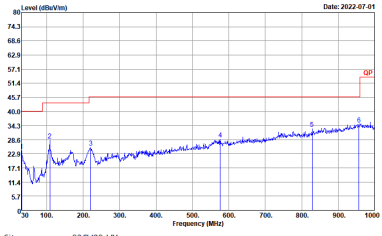
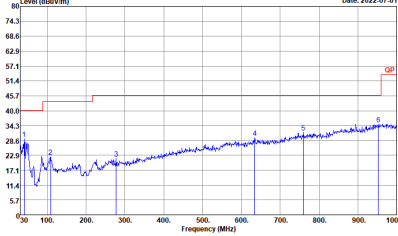


802.11a \_Tx\_CH36\_MIMO <Ant. 7+8> + BT\_Tx\_CH78\_1Mbps\_Ant. 8 (LF)

ANT	802.11a CH36 5180MHz +BT CH78 2480MHz (LF)	
Simultaneously	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 HORIZONTAL</p>	 <p>Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 VERTICAL</p>



802.11a \_Tx\_CH36\_Ant. 7 + 802.11b\_Tx\_CH11\_Ant. 8 (LF)

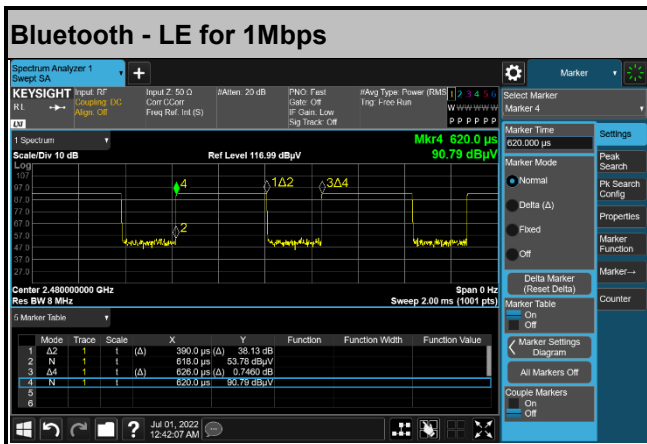
ANT	802.11a CH36 5180MHz + 802.11b CH11 2462MHz (LF)	
Simultaneously	Horizontal	Vertical
<p>QP / Peak</p>	 <p>Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 HORIZONTAL</p>	 <p>Site : 03CH20-HY Condition : QP 3m LF_55606&amp;08_1101017 VERTICAL</p>



### Appendix C. Duty Cycle Plots

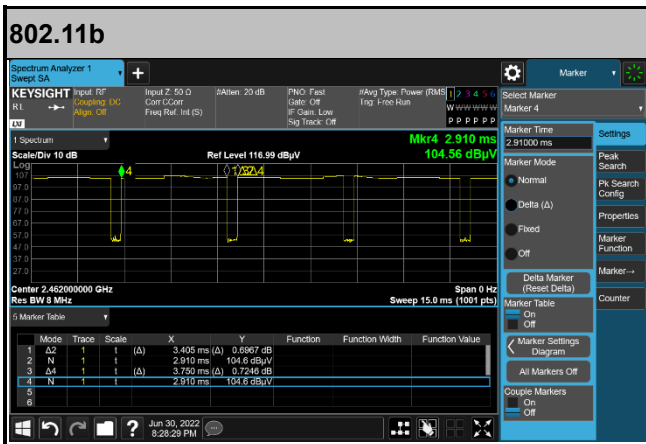
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
Bluetooth – LE _ Ant. 7 + WLAN (2.4GHz) _ Ant. 8 and Bluetooth – LE + WLAN (5GHz) _ MIMO <Ant. 7+8>	Bluetooth - LE for 1Mbps	62.30	390	2.56	3kHz
Bluetooth _ Ant. 7 + WLAN (2.4GHz) _ Ant. 8	802.11b	90.80	3405	0.29	300Hz
Bluetooth – LE _ Ant. 7 + WLAN (2.4GHz) _ Ant. 8	802.11b	99.13	-	-	10Hz
Bluetooth _ Ant. 8 + WLAN (2.4GHz) _ Ant. 7	802.11b	8.07	310	3.23	10kHz
WLAN (2.4GHz) _ Ant. 7 + WLAN (5GHz) _ Ant. 8	802.11b	97.94	664	1.51	3kHz
WLAN (2.4GHz) _ Ant. 7 + WLAN (5GHz) _ Ant. 8	802.11a	99.29	-	-	10Hz
WLAN (2.4GHz) _ Ant. 8 + WLAN (5GHz) _ Ant. 7	802.11b	97.94	664	1.51	3kHz
WLAN (2.4GHz) _ Ant. 8 + WLAN (5GHz) _ Ant. 7	802.11a	99.29	-	-	10Hz
Bluetooth + WLAN (5GHz) _ MIMO <Ant. 7+8> and Bluetooth – LE + WLAN (5GHz) _ MIMO <Ant. 7+8>	802.11a	99.05	-	-	10Hz

<Bluetooth – LE \_ Ant. 7 + WLAN (2.4GHz) \_ Ant. 8 and Bluetooth – LE + WLAN (5GHz) \_ MIMO <Ant. 7+8>>

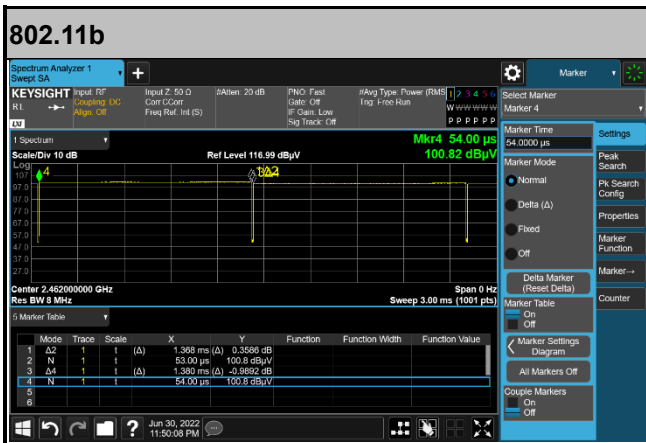




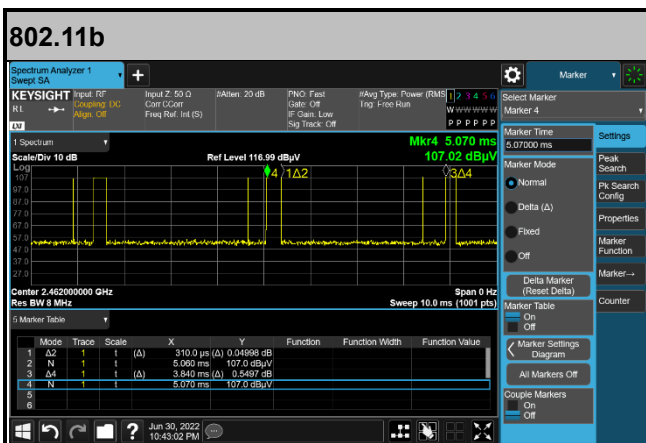
<Bluetooth \_ Ant. 7 + WLAN (2.4GHz) \_ Ant. 8>



<Bluetooth – LE \_ Ant. 7 + WLAN (2.4GHz) \_ Ant. 8>

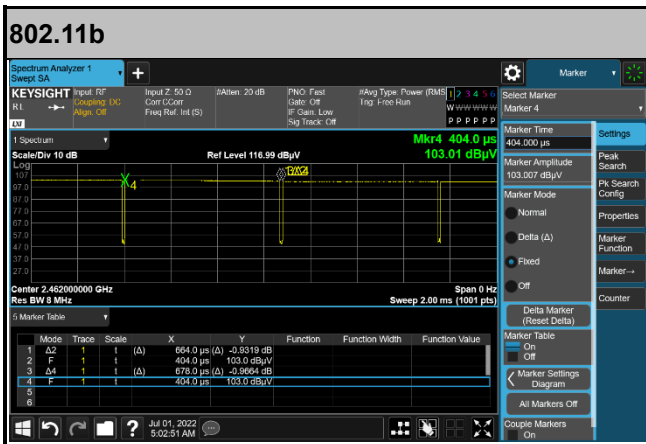


<Bluetooth \_ Ant. 8 + WLAN (2.4GHz) \_ Ant. 7>

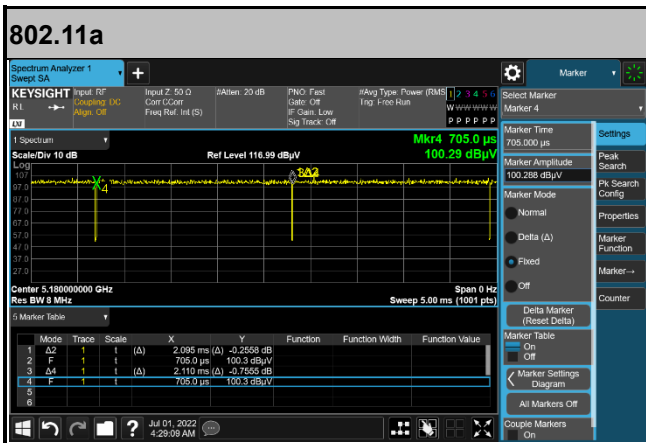




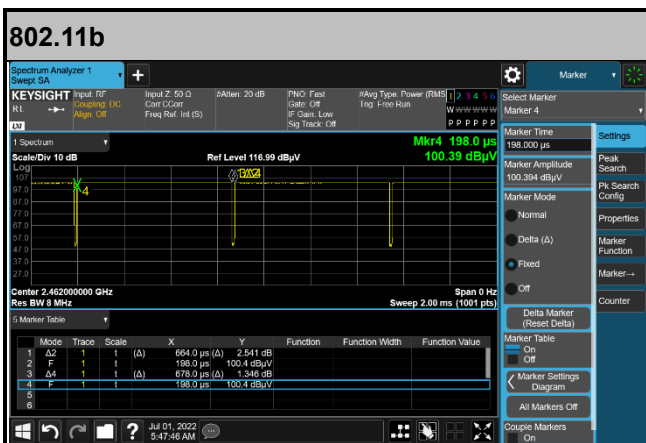
<WLAN (2.4GHz) \_ Ant. 7 + WLAN (5GHz) \_ Ant. 8>



<WLAN (2.4GHz) \_ Ant. 7 + WLAN (5GHz) \_ Ant. 8>

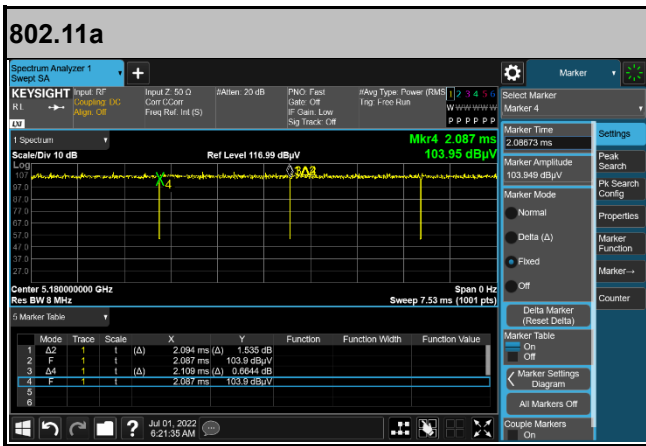


<WLAN (2.4GHz) \_ Ant. 8 + WLAN (5GHz) \_ Ant. 7>





<WLAN (2.4GHz) \_ Ant. 8 + WLAN (5GHz) \_ Ant. 7>



<Bluetooth + WLAN (5GHz) \_ MIMO <Ant. 7+8> and Bluetooth – LE + WLAN (5GHz) \_ MIMO <Ant. 7+8>>

